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THE POTENTIALITIES FOR INDUSTRIAL RENEWAL IN JERSEY CITY.

REPORT TO
COMMUNITY RENEWAL PROGRAM, THE CITY OF JERSEY CITY.



Arthur D. Little, Inc.

THE POTENTIALITIES FOR
INDUSTRIAL RENEWAL
IN JERSEY CITY

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Community Renewal Program
The City of Jersey City

April, 1967

C-68466

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April 24, 1967

Mr. Sidney L. Willis
Project Director
Community Renewal Program
Office of the Mayor
City Hall
Jersey City, New Jersey 07302

Dear Mr. Willis:

We are pleased to transmit to you this report, "The Industrial Economy of and Opportunity for Industrial Renewal in Jersey City," prepared in accordance with and fulfillment of our contract between the Jersey City Redevelopment Agency of the City of Jersey City and ourselves and as partial fulfillment of the contract between this agency and the Department of Housing and Urban Development, Project no. New Jersey R-126 (CR).

The approach to Jersey City's Community Renewal Program, of which this report is a part, has been comparable to a rifle shot rather than to a shotgun. Therefore, our work has included several precise studies of a rather limited interest, some of which are of a confidential nature, which we mutually agreed not to include in a report such as this which is designed for a more general audience. These special studies included an updating of the statistical material to be found in your report, "Waterfront Development - A Planning Approach," 1964, an analysis of the various waterfront railroad properties and their likely future as seen from the vantage point of both their owners and various government agencies, an analysis of the effect which the forthcoming railroad mergers might have on these properties and suggestions as to the next steps the City of Jersey City might take with regard to Point Breeze.

The precision with which you were able to define your Community Renewal Program needs has enabled our research to be both more detailed and more extensive than would otherwise be the case. The fruits of our labor have resulted in a number of discrete studies which, to the general reader, might seem to have the appearance of independence rather than interdependency. Actually, however, such

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Project Director

a notion would be misleading because running through these studies is the theme of private and public actions renewing the industrial base of Jersey City.

In order to highlight this thematic approach our report first focuses on analyzing the structure of Jersey City's industrial base. In the development of this analysis we proceed from the general to the particular. That is to say, we first examine the general economy, then specific areas, and finally specific buildings. After this examination we present in the final chapter recommendations in programmatic terms for both strengthening the industrial economy and for revitalizing the public agencies concerned with economic development.

The first chapter of this report is devoted to the economy of Jersey City, its current patterns and, more particularly, its future trends. In this section we spell out the forces which attract and repel industry to Jersey City and give particular attention to the changing economic base.

We then turn our attention to a detailed analysis of the waterfront. Here we have inventoried each major facility in six separate districts and evaluated their condition, remaining years of life and likely future use. We have also indicated the eventual future use of each area and likely public and private actions which might be taken to effect the redevelopment of these districts.

The third section is concerned with analyzing the environment of nine industrial districts in the City of Jersey City. In this section, we have included recommendations concerning types of treatment which might be undertaken in each of these industrial districts to halt and eventually eradicate the spread of blight. This is followed by a detailed inventory of the condition of 250 industrial buildings in Jersey City in the fourth section of this study.

The final section describes a programmatic approach to industrial renewal which Jersey City might wish to consider. In this chapter we have included an appraisal of the administrative, legal and financial mechanism which might be utilized to carry out such a program. Furthermore, we suggest both an organizational and administrative structure the City might wish to adopt in order to execute such a program and give preliminary estimates as to the cost of industrial renewal in four areas.

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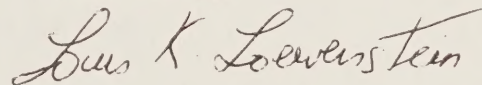
Mr. Sidney L. Willis
Project Director

A number of supporting studies may be found in the appendix. Here, for example, we have included studies on urban industrial planning standards, on a data processing system, and on selected tools for industrial development in urban areas.

Throughout the course of this study we have been aided by a number of people on your staff, in the office of the Redevelopment Agency and in other organizations. For especial assistance we would, therefore, wish to single out and to indicate our appreciation to Mr. Ezra Chall from the Community Renewal Program, Mr. Joseph Feinberg and Mr. Marvin Grey from the Redevelopment Agency, and Messrs. Alvin E. Gershen and John J. Lynch from Alvin E. Gershen Associates, as well as Mr. Walter Knight of the Jersey City Chamber of Commerce, and Mr. M. Girard Kelley of the Area Development Council for contributions above and beyond the call of duty. In addition, mention should be made of the fact that more than 75 Jersey City businessmen gave of themselves in answering lengthy questionnaires about their present and future operations in Jersey City and another 250 businessmen allowed us to inspect their premises as a part of our condition survey.

We trust that as a result of all these efforts, Jersey City will truly have an Industrial Renewal Program of which it can be proud.

Yours truly,

A handwritten signature in cursive script that reads "Louis K. Loewenstein". The signature is written in dark ink and is positioned above the printed name.

Louis K. Loewenstein

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I. AN ANALYSIS OF JERSEY CITY'S INDUSTRIAL ECONOMY

A. Introduction

This report is concerned with suggesting a comprehensive industrial renewal program for the city of Jersey City. In order to accomplish this objective it is necessary to consider first the industrial economy of Jersey City today, and what it is likely to be in the future. Therefore, this chapter is directed toward revealing the underlying patterns and trends of the economic base in Jersey City. By way of an introduction to this subject, the following section discusses how Jersey City's economy has been reviewed by other authors, and presents the manner in which Jersey City is viewed by those outside the city. We then turn our attention to the prospects for growth in the industrial economy. In a sense, this section shows how Jersey City is viewed by those inside the city. One of the bases for this analysis, for example, was a questionnaire which was sent to every significant industrial employer in Jersey City. The next section deals with Jersey City's assets and liabilities and, hence, a discussion of the opportunities for development, as well as the challenges to improve the city's economic base may be found here. These changes will not occur in isolation, and, therefore, the succeeding section is concerned with a detailed forecast of the growth prospects of Jersey City's industries. These estimates are expressed both in terms of employment and land area. Finally, in order that the Redevelopment Authority might plan more intelligently for these industries, we offer their salient site attributes and requirements in a very detailed fashion.

The following chapters are derived from this basic overview of the city's economy. Thus, Chapter II deals with industrial renewal and the future of seven waterfront districts. Then we focus on the potential for renewal in nine industrial districts. This discussion is contained in Chapter III. Chapter IV sharpens the area of analysis to a smaller scale as the condition of 250 industrial buildings is scrutinized and reported. Finally, in Chapter V a program is offered which emanates from the findings of the preceding four chapters. In the last chapter we propose a program which the city might consider mounting - in part or in toto - in order to begin to make operational a means toward effecting an ongoing industrial renewal process. These recommendations should not be considered, however, without our understanding the role which Jersey City plays in the metropolitan fabric. Therefore, as we mentioned above, we now introduce a review of the literature concerning Jersey City and its economic relationships on both an intra- and inter-regional basis.

B. A Review of the Economic and Market Patterns of Jersey City and Hudson County Within the New York Metropolitan Area

1. The Lack of Understanding of Jersey City's Role in the Region

The most striking conclusion that can be gained from a review of the literature regarding Jersey City's economy within a larger context is that relatively very little has been written about it and that whatever has been written has been neither especially incisive nor particularly optimistic. For example, in a book on industrial location in the New York Metropolitan area, written in 1956 by John Griffin, Jersey City was dismissed in the following fashion:

Jersey City is largely static. The larger firms indicate that the cost of moving would be so great as to make it prohibitive. Room for expansion is not available. However, high wages and high taxes are a problem but the feeling is less strong about them than in Bayonne and Hoboken. The Jersey City Industrial Commission, located at City Hall, has undertaken some promotional work. P. Lorillard Company has announced that it will close its eighty-five year old Jersey City plant by the end of the year. This is the last major cigarette factory in the northern states. The age of the Jersey City plant made it impossible to modernize successfully. The new factory at Greensboro, North Carolina, will be closer to the source of tobacco supply.¹

In very much the same vein, the New York City Planning Commission writes about the Hudson County waterfront:

This sector of the port is relatively stable in importance, moving 12 percent of the harbor's general cargo tonnage over the Hoboken Port Authority piers and private facilities extending from Jersey City to Weehawken.²

¹John L. Griffin, Industrial Location New York: The City College Press, 1950, p.52.

²New York City Planning Commission, The Port of New York Proposals for Development, Comprehensive Planning Report, #0164-Sept., 1964, p.5.

Perhaps the best indication of the relative lack of attention which has been paid to Jersey City may be found in the eight-volume study conducted by Harvard economists in the Regional Plan Association in 1952-1959. Although it contains a number of minor intellectual tid-bits such as, "Lee De Forest, inventor of electronic tubes began his first company in 1901 in Jersey City in an old rented machine shop"³ and, "less than 10 percent of the commercial loans of member banks in Jersey City went to borrowers outside the city,"⁴ this massive and comprehensive study gives less importance to Jersey City's economy and its interrelations in the metropolitan area⁵ than did the first regional plan of 1929. The Jersey City waterfront in this latter study, for example, was referred to in the following terms:

"The Jersey City -Bayonne waterfront has unique potentialities for development. Of the eight areas most suitable for port extension, the waterfront of Bayonne and Jersey City had railroad facilitation equal to those in any of the other areas, and ranked first in the advantages of propinquity to the center of the port and third in regard to accessibility for shipping. It had been shown that about 131,500 additional linear feet of pier, wharf, and quay length could be economically developed along this waterfront and that this would be fully utilized by 1965. This represents almost two-thirds of the estimated additional port requirements for the whole port of New York by that date..."⁶

In the 1929 regional survey, it was estimated that along this Bayonne and Jersey City waterfront about 160 acres would be required for new large-scale industrial development by 1940 and 400 acres by 1965, which would still leave about 600 acres suitable for future development.

³B. B. Helfgott, W. Eric Gustatson, J. Hurd, Made in New York, Cambridge, Harvard Univ. Press, 1961, p.252.

⁴S. Robbins, and N.E. Terleckyj, Money Metropolis, Cambridge, Harvard Univ. Press, 1961, p.11.

⁵Two exceptions to this generalization are to be found in the area of taxes and predictions discussed below.

⁶Regional Plan Association, The Building of the City - Regional Plans of New York & Its Environs, Vol.II (1931) p.527-529

On the other hand, aside from a handful of projections and tables, this more recent regional plan study devotes less than two pages to Jersey City's economy, and/or Jersey City's economy as it relates to the region. Indeed we reproduce below all other pertinent quotations from this massive study with the exception of those touching on taxes.

As the counties bordering the Hudson have spurted in population and jobs, their local banks have grown rapidly and taken over some of the business which formerly went to the old centers in Jersey City.⁷

In one decade or another after 1920, Jersey City ... registered net population declines.⁸

Vacant manufacturing space in Jersey City due to departure of large plants opens up space for small plants in competition with the New York Central Business District.⁹

In Jersey City in the construction industry, the role of employer contribution is much smaller than in New York City.¹⁰

The low income concentrations around Jersey City... provide then, a source of potential labor for the garment industry.¹¹

The wages of Jersey City are also above the wages in most other areas.¹²

⁷S.M. Robbins and N.E. Terleckyj, Money Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 111.

⁸Raymond Vernon, Metropolis, 1985, Cambridge, Harvard Univ. Press, 1961, p. 130.

⁹R. Vernon, Metropolis, 1985, Cambridge, Harvard Univ. Press, 1961, p. 118.

¹⁰M. Segal, Wages in the Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 70.

¹¹M. Segal, Wages in the Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 141.

¹²M. Segal, Wages in the Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 68. We presume that by "most other areas" Mr. Segal means metropolitan areas. In contrast to other metropolitan areas, Jersey City wages are higher but within the N.Y. metropolitan area they run below those of New York City.

The Jersey City area maintained a small differential below the salary level of New York City--running at about 2-3 percent.¹³

By World War I a small manufacturer could find significant amounts of industrial space for rent in...Jersey City.¹⁴

(Jersey City is one of several) mature industrial cities of New Jersey (with a number of) operative labor.¹⁵

The fifth and third wards of Jersey City have high densities of about 50,000 per square mile.¹⁶

(Jersey City has) in and out commuting balanced hence the appearance of self sufficiency.¹⁷

2. Taxes in Jersey City

Whether or not there is now any existing or current truth to the contention, the underlying fact remains that the only area in which Jersey City was singled out for attention in the Regional Plan Studies was in the field of taxation and in this case Jersey City had the highest taxes of any community in the metropolitan area. Thus one may find mention of

¹³M. Segal, Wages in the Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 74.

¹⁴E. M. Hoover and R. Vernon, Anatomy of a Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 33.

¹⁵E. M. Hoover, and R. Vernon, Anatomy of a Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 234.

¹⁶E. M. Hoover, and R. Vernon, Anatomy of a Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 224.

¹⁷E. M. Hoover and R. Vernon, Anatomy of a Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 16.

the fact that:

New York State relies more heavily on the corporate income tax and New Jersey relatively more on real property tax.¹⁸

and more to the point is:

In the five or six years after 1950, Jersey City... registered increases in the average property tax rates, calculated on the basis of the "full value" of the property.¹⁹

and even more relevant is the statement that:

Local and state tax levels of manufacturers in 1955 in Jersey City were 160.1 percent--that is 60.1 percent higher than an average in sixty-four locations in the region which equalled 100.²⁰

What this last reference failed to say was that Jersey City had the highest tax levels of the sixty-four cities in the sample in that year and as Alan Campbell who worked on the study wrote, "In the absence of other apparent reasons for Jersey City's standout position one is led to assume that this is, in part, the legacy of a past history of inefficient and corrupt government there."²¹

We are not in a position to state whether or not this condition of relatively high taxes in the region still prevails; that it does, however, probably is unlikely since new tax laws were enacted by the 1966 New Jersey State Legislature and more importantly since the assessment ratio and tax rate (when adjusted to 100 percent valuation) have been declining since 1960 and since the total assessed valuations (again when adjusted to 100 percent

¹⁸E. M. Hoover and R. Vernon, Anatomy of a Metropolis, Cambridge, Harvard Univ. Press, 1961, p. 58.

¹⁹R. Vernon, Metropolis, 1985, Cambridge, Harvard Univ. Press, 1961, p. 176.

²⁰R. Vernon, Metropolis, 1985, Cambridge, Harvard Univ. Press, 1961, p. 131.

²¹Alan K. Campbell, "Taxes and Industrial Location in the New York Metropolitan Region", National Tax Journal (September, 1958, Vol. XI, No. 3, p. 202).

valuation) have been rising since 1960 in Jersey City. Nevertheless, these facts may not have sufficiently come to the attention of industrial location decision makers and they may still be operating under the old notion and probable misapprehension that Jersey City's tax vote is presently the highest in the region.

3. A Review of Projections

Although relatively little narrative description has been given to Jersey City, Hudson County has been the subject of a rather large amount of statistical forecasts and projections. We indicate these projections on page 16.

It may be noted that the latest such projections--those prepared by the Port of New York Authority predicts an increase in Hudson County's population by 1985. This runs contrary to both the Authority's earlier study on this subject (Metropolitan Transportation) and to each of the other three population forecasts we were able to review. (Reference was not made in this compendium to the Hudson County Master Plan.) The accompanying employment forecast is slightly more optimistic than those made by the Regional Plan Association. Each of the five projections suggest an increase in employment in Hudson County and in this discussion we may assume that since employment in Jersey City comprises more than a quarter of Hudson County's total employment, it will move in the same direction and also tend to grow. Our review of the literature, it should be noted, failed to unearth any separate employment forecasts for Jersey City.

The same Port of New York projections indicate that manufacturing employment in the next twenty years will rise by 25 percent, that government employees and wholesale trade will almost double, that finance, insurance, and real estate service industries will grow by about 10 percent, while retail trade, transportation communication and public utilities and construction employment would decline somewhat. These generalizations would appear to be reasonable, as well, for Jersey City in the absence of a definitive study on the subject. Similarly, the only detailed projections for manufacturing industries in a regional context indicate that employment in the electronics industry may drop from 1960 to 1985 by about 30 percent in Hudson County; while in the same period women's and children's apparel is slated to grow by about 70 percent and printing and publishing by about 30 percent, and we would expect that these same relationships would hold as well for Jersey City.

4. Other Pertinent Literature

The preceding section referred to the Port of New York Authority's 1963 study, Metropolitan Transportation, as one of the larger repositories of regional studies which refers to the Jersey City waterfront and its economy. For example, the book notes that "industrial renewal projects are planned for Jersey City," (p.46) and they indicate a definite shipping potential for the waterfront area by noting that:

Even if future marine terminal development programs bring about a somewhat different distribution of marine activation among the various sectors of the port, no new channel requirements are foreseen for the accommodation of general cargo vessels in common carrier service. All of the areas still available for development, including Communipaw, Pavonia Avenue and Caven Point in Jersey City, are located along the existing primary channel of the port, and these channels are fully capable of accommodating both present and future cargo ships. (p. 184)

The three areas, not heretofore developed for marine terminals could be developed for conventional cargo use (as could Point Breeze at the Bayonne/Jersey City line).

With reference to trucking the study notes: "Before World War II--inter city motor freight terminals were centered largely in Manhattan...Brooklyn, Jersey City, Paterson, Passaic, and Newark....The eastern margins of the meadows are lined (now) with terminals, particularly in North Bergen, Jersey City and Kearny." (p. 217)

This study also indicates that in the 1948 to 1958 period the Hudson County share of the regional employment in personal services declined from 5.1 to 4.3 percent; that manufacturing employment as a percent of the region declined from 9.7 percent (in 1929) to 7.1 percent (in 1958) and is slated to be 5.5 percent of the region in 1985, but on the optimistic side, the percentage of the region's repair services increased from 4.1 to 5.0 percent in this decade. (p. 39) Of more significance, possibly is their statement that the manufacture of women's and children's apparel is expected to increase in Hudson County and "it is the industry which is expected to counteract the long-range employment decline in Hudson County." (p. 39)

Two other studies analyze Jersey City's problems quite well, and we quote from them below:

Prospects for the Future of Manufacturing in Jersey City

"Until the recent downward adjustment in Jersey City taxes is established as a permanent policy in the minds of the public, and unless new industrial sites with ample space for one-story buildings can be made available in Jersey City at reasonable cost, the industrial survey of Jersey City indicates a grave danger of a marked decline in factory employment. The failure of Jersey City manufacturing jobs to increase at a time when nearly every other industrial city is registering sharp gains is in itself ominous.

Jersey City has a favorable labor situation; it is in the heart of the richest market in the world and it enjoys the benefits of direct location on the largest port, but its tax rate and its cramped industrial layout are nullifying these advantages. It must lower its tax rate and provide industries with planned industrial areas, properly provided with railway and truck highway connections, in which one-story plants can be erected, if industrial employment is to be increased."

It might be surprising to realize that this quotation was written before 1950 by Churchill-Fulmer and Associates and it may be found in their original Jersey City master plan on pages 11-17.

The other analysis refers to Hudson County, but applies equally well to Jersey City. It is to be found in the recently released Overall Economic Development Program (June, 1966) by Hudson County Planning Board, and we quote from II, pp. 84-90.

"Problems That Retard Growth

1. Introduction

As stated earlier, Hudson County's opportunities for economic growth and prominence in the center of the nation's largest single industrial, business and cultural center are complicated by the problems of urban growth, over-crowded living conditions, building deterioration, high rates of unemployment and complex traffic problems.

The County represents a built-up aging part of the New York Metropolitan Community and in common with other similar areas shows a declining level of population. As an integral part of the regional core,

it no longer represents the suitable location for heavy industry which it did originally when it still lay on the metropolitan fringe.

Considering existing traffic problems and the vast increase in population and automobile ownership anticipated in the next 25 to 30 years, Hudson County and the region are faced with unique and complex problems in transporting people and goods.

The transport of freight from the Port of New York has a marked influence on the traffic patterns of Hudson County. On an average weekday trucks account for almost one-fourth of the vehicles entering Manhattan from New Jersey. The location of port facilities in Hudson County causes extremely high truck volumes on the arteries of the county.

Although the volume of freight handled by railroads has fallen off in recent years, rail transportation still remains a major means of transporting freight. 27.5 percent of the railroad freight transported into, out of and through the Port of New York was handled at freight stations in Hudson County in 1962.

In the County as in other core areas, absolute losses in employment were experienced in most of the important manufacturing industry groups. From the evidence available a substantial part of the core's losses in both manufacturing employment and manufacturing establishments, was the Ring area's gain, particularly in the case of manufacturing firms of larger-than-average size such as Electrical Goods and Machinery, and Chemicals.

The effects of the decline in the ability of Hudson County's present industries to furnish new employment opportunities is intensified further by the circumstance that only industries which add high value per worker can afford the wages which are prevalent in the area.

Employment in manufacturing in Hudson County continues to decline as it had in early post-war periods. This decline has persisted in Hudson County along with core areas in general, while growth in outlying suburban areas and large absolute increases in the number of persons employed in manufacturing have proceeded generally at the expense of the earlier industrial center.

Manufacturing employment, however, still accounts for about 60.6 percent of total employment in the county. The decline in manufacturing employment appears to be characteristic of older industrialized core areas throughout the country and can be attributed to problems which are not typical for Hudson County alone.

Manufacturing establishments with a smaller-than-average number of employees which have increased in number in the county during the last decade include Electric Goods and Machinery, Fabricated Metals, Apparel and Finished Goods, and Printing and Publishing. Of the establishments with a larger-than-average number of employees, only the Paper and Allied Products industry has shown any increase in the number of establishments.

To a larger extent, these industries characterized as such by an unstandardized output such as fashion goods, commercial printing, and fabricated metal fittings have developed an affinity towards a central location in the core. These industries have highly developed external economies and can utilize space intensively and make use of the smaller and older facilities in the core.

The absence of any significant growth in retail trade in the county and surrounding core up to now is partially explained both by the proximity of the county to New York City and by the development of suburban shopping centers as well as by increased retail facilities in the county which have not matched the more modern facilities that have sprung up in the Ring areas. Because of this lag in the provision of retail facilities, the county has not experienced any major increase in retail trade activity during the past decade.

The drop in manufacturing employment is reflected in a decrease in the overall number of job opportunities in Hudson County and in total resident population as well.

Hudson is one of the stabilizing core counties of the metropolitan area within which land development is now virtually complete and which are declining in population and in economic activity, either absolutely or as a percentage of the total region. Like the rest of this core area, Hudson County functions economically in an extremely complex fashion; it represents a source of jobs for the population of the entire metropolitan region and at the same time almost 30 percent of its residents find employment outside the county. It has

been estimated that this interchange of workers represents two-and-a-quarter times as many commuters into the county as out of it. Large land areas within the county have become derelict as 19th century industries, attracted by particular location advantages which are no longer valid, waned and disappeared. A small part of this land has been converted to new uses, and major redevelopment proposals have recently been made for large decaying waterfront areas, but these actions are responses to a new set of locational advantages which are becoming apparent in the county and are not as yet numerous enough to offset the effects of decades of decline. Hudson County can stand as an almost perfect example of the aging urban area which is losing population, economic importance and actual income, primarily because its plant and equipment are out of date, shabby and worn. At the same time it boasts superior locational advantages, situated as it is at the core of the nation's largest metropolitan center. It will, however, not be in a position to capitalize fully on its location, until such time as new uses are able to outbid existing ones on a large scale or until a definite program is undertaken to make sites available for uses which are capable of growth. Without the accomplishment of one or the other of these alternatives, the present downward drift will doubtless continue.

Since Hudson County originally lay within the metropolitan fringe area of New York City, it was a suitable location for heavy, extensive industry. It has now become an integral part of the core and the degree of this suitability has lessened greatly. The abandoned refineries at Bayonne are a prime example of this. Hemmed in by other development they lacked sufficient land area for the construction of the new wide-spreading facilities modern technology demands and were forced to close down.

Further large areas of abandoned industrial land are found in the riverside railroad yards, which in the 19th century represented the primary source of income for the county but are now derelict. The traditional specialization in transportation activity has not disappeared, for Hudson County possesses good highway links with the entire country. Thus, it is not surprising that trucking and truck warehousing are increasing, for this is an industry in which national employment

jumped 600 percent in the four decades between 1920 and 1960. All jobs in transportation in Hudson County in 1962 represented 10.3 percent of total employment; of these jobs one-half were in trucking and warehousing. Even in so short a period as the three years between 1959 and 1962 the number of jobs in transportation increased by one-half of one percent.

There are definite factors present in Hudson County for inducing future growth. It lies in immediate proximity to the New York-Northeastern New Jersey market and supplies, and is the center of, transportation facilities which are unrivaled anywhere. In spite of the fact that there are no development sites immediately available and there are a few site complications to be overcome, there is a large-scale reservoir of potentially available vacant land along Newark Bay in the meadowlands area of the County. The entire Bay has already undergone massive transformation. Ports Newark and Elizabeth on the opposite shore have developed into major marine terminals and continue to expand. Within Hudson County itself a 181 acre terminal at Kearny is expected to handle more than three million tons of cargo by 1970. In addition, the New York Port Authority has proposed a channel of Newark Bay, to be followed by deepening the Hackensack River along a seventeen-mile stretch. These improvements would aid in the reclamation of meadowland and assist development of the Bay and Hackensack River areas of the County where about 30 percent of the County's total area has remained unbuilt. These lands represent an invaluable pool of sites for future industry and distribution facilities in one of the best locations in the Nation.

At the same time, the pressure for living quarters in the metropolitan area which has resulted in a continuous line of high-rise luxury apartments from the George Washington Bridge to the Lincoln Tunnel is beginning to affect lower Hudson County too. Over the past year mammoth construction projects utilizing abandoned railroad property have been publicized for both the Jersey City and Weehawken Hudson riverfronts. Both of these proposals could represent major economic stimuli, for they would bring new population and new incomes to an area which has been characterized by residential stagnation and decay, and might ultimately stem the downturn in retail trade which has held over the last ten years.

However, it will not suffice to wait for the automatic working of the market. Hudson County is faced with problems of worker education, land preparation and utilities extension which can only be accomplished on the basis of a planned program, but which are vital to future economic growth in the area.

As noted previously, the greater part of the land within the county now in industrial use has been reclaimed. The cost of reclaiming existing vacant tracts of land for development is considerably higher than past expenditures since tidal marshes constitute most of this vacant land. The marshes occupy about 30% of the total county area and the reclamation of these lands is of vital importance to the future of this area since any major expansion of industrial activity must rely on their development. This particular problem cannot be solved at the area level but requires the assistance and participation of adjacent counties including particularly, Bergen County.

In addition, any developments which will enable the marsh land areas to be utilized will add greatly to the potential capacity of the County's tax base as well as the changing utilization of waterfront property and the potentials of urban renewal in the more congested areas of the County.

Since recessions appear as a permanent fact of economic life, it is important that the area try to attract industries which exhibit a relatively greater amount of employment stability during such recessions. In Hudson County, major durables as a group are significantly more vulnerable to business recessions than non-durables (See Plate 28). Since this category provides 43.8% of the County's manufacturing jobs, it is apparent that the area should seek to attract more non-durable and other less sensitive-type industries.

Hudson County's waterfront area, which is actually a part of the New York Harbor, is littered with hundreds of abandoned sailing ships, barges, ferryboats, tugboats and the like - some 50% of these are located just off the shores of Weehawken with several hundred others cluttering up the Bayonne area. These derelicts are eye sores which are visible to the many millions of people who use the Lincoln Tunnel each year and inhibit the development of the waterfront area itself. It is hoped that the current survey being undertaken by the U.S. Army Corps of Engineers will result in the removal of all the accumulated marine rubbish and will be the start of large-scale waterfront

development. This project will, of course, require Federal and Interstate cooperation for its resolution.

The area's financial resources are insufficient to provide the means for eliminating the problems generally outlined above. The area looks to the State of New Jersey and particularly to the Federal Government to assist it through the various grant programs which are now available."

In conclusion they state on p. 73 that, "Hudson County's opportunities for economic growth and prominence in the center of the nation's largest single industrial, business and cultural center are complicated by the problems of urban growth, over-crowded living conditons, building deterioration, high rates of unemployment and complex traffic problems."

5. Summary and Conclusions

It would seem that the consensus of these other studies appear to point out that Jersey City should be playing a slightly more active economic role in the metropolitan region in the future than it now does. In particular the garment industry and the printing industry are expected to grow, as we might add are other industries such as laundries, building supply materials and baking and bottling, with close ties or linkages to Manhattan while the electronics industry may decline somewhat. The future of the warehousing industry is not that as to suggest that it might be considered as a growth industry. On the other hand, the computing industry and other business services which are related to New York's financial community appear to have promising futures. With specific reference to shipping, railroads and other transportation or distribution industries, with the single exception of truck transportation, the majority of the studies cited indicate that the future of these industries in Jersey City is not such as to suggest appreciable growth - and indeed a modest but steady decline is the more probable future for them.

TABLE I.

Various Projections for Hudson County
(in thousands)

	<u>1955</u>	<u>1956</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
1. Population								
2. Population			611	594	593	597	601	620
3. Population	645			590		560		540
4. Population				650		625		600
5. Population			611	590	575	560	550	540
6. Population			611	609.0	606.0	600		
						609.0	612.1	618.2
7. Total Employment				277.9	286.0	293.4	299.6	305.0
8. Total Employment		279.2						287.9
9. Total Employment				309.7		315.7		312.3
10. Total Employment			278.5	280	294	302	309	314
11. Total Employment			240	250	260	270		
12. Manufacturing Employment				40.9	94.4	46.4	48.4	50.4
13. Manufacturing Employment				97.5	96.0	96.0	96.0	96.0
14. Agriculture & Mining Employment				.1	.1	.1	.1	.1
15. Construction Employment				8.7	7.7	7.2	6.7	6.7
16. Service Industry Employment				33.8	36.8	38.8	38.8	36.8
17. Government Employment				22.2	25.8	29.8	34.8	39.3
18. Transportation, Communication & Public Utilities Employment				36.1	34.6	34.1	34.1	34.1
19. Wholesale Trade Employment				15.5	17.5	20.5	24.0	28.0
20. Retail Trade Employment				34.0	33.0	32.0	32.0	32.0
21. Finance, Insurance and Real Estate Employment				9.6	10.0	10.0	10.0	10.5
22. Womens' and Childrens' Apparel Employment		5.3		6.6		8.2		8.9
23. Printing & Publishing Employment		3.1		3.4		3.7		4.0
24. Electronics Employment		10.2		8.5		8.1		7.7
25. Manufacturing & Wholesale Employment			134.5					158
26. Other			144.0					156

Sources - See following page

Arthur D. Little, Inc.

<u>Source</u>	<u>Numbers</u>
Port of New York Authority, <u>The Next Twenty Years</u> , 1966.	1, 7, 12, 14-21
Port of New York Authority, <u>Metropolitan Transportation</u> , 1980, 1963.	2, 8
B. Berman, B. Chinitz, E. Hoover, <u>Projection of a Metropolis</u> , 1960.	3, 9, 22-24
Regional Plan Association, <u>Spread City</u> , Bulletin #100, 1962.	4, 10, 25, 26
Regional Plan Association, <u>People, Jobs and Land</u> , Bulletin #87, 1957.	5, 11
New Jersey Department of Conservation and Economic Development, <u>Supply and Demand Factors of Industrial Land Use</u> , 1963.	13
Research and Statistics Section, New Jersey Department of Commerce and Economic Development, <u>Estimated Population Projection</u> , 1966.	6

C. An Analysis of Industrial Patterns in an Era of Change

1. Introduction

In this section we shall analyze the principal industries located in Jersey City with respect to their expansion potential and requirements. In addition we shall discuss their tenure, their attitudes concerning their present and future site characteristics, their reasons for locating in Jersey City, their employee characteristics and their future intentions. We have also included in this section a special study of industrial realtors.

The basis for our succeeding analysis was a questionnaire which was submitted to every industry in Jersey City which had more than 25 employees.¹ In addition, personal interviews and/or follow-up telephone calls were held with every firm which engaged more than 100 employees. In toto we endeavored to question 169 firms. Some of these had moved away and others had gone out of business. Nevertheless we received returned questionnaires from 83 firms. This is a response rate of 49 percent which is unusually high and gives considerable credence to our findings and conclusions. There are 29 firms in Jersey City who employ more than 100 employees. Of these firms, 18 responded to our questionnaire for a response rate of 62 percent.

We were assisted in the execution of the survey by the Jersey City Chamber of Commerce. Under the direction of Arthur D. Little, Inc., they prepared the initial and follow-up mailings and wrote letters to the executives of the 29 larger firms introducing them to the fact that a representative from Arthur D. Little, Inc. would be contacting them regarding the questionnaire. The completed questionnaires have been turned over to the Jersey City Division of Planning.

It is important to note that the following answers did not vary in any significant sense by industrial district. This is due in large measure to the fact that 60 percent of the responses were not located in the nine industrial districts. This is shown by the areal distribution given below in Table 2 .

¹A copy of this questionnaire may be found in Appendix III.

Table 2

Location of Responses to Industrial Survey,
Jersey City, 1966

<u>Industrial District</u>	<u>Number of Responses</u>	<u>Percentage</u>
1	2	2
2	1	1
3	7	9
4	3	4
5	1	1
6	4	5
7	6	7
8	5	6
9	4	5
Not in an ind. district	<u>48</u>	<u>60</u>
Total	81	100%

Source: Arthur D. Little, Inc.

In similar fashion, but for different reasons the answers to the questions also did not vary by different industries in any meaningful statistical sense. This occurred because there were responses from sixteen different types of industry and no one industrial type accounted for more than fourteen percent of the total responses. This is shown in Table 3 below.

Table 3

Types of Industries Responding to Industrial Survey
Jersey City, 1966

<u>Type of Industry</u>	<u>No. of Responses</u>	<u>Percentage</u>
Food and kindred products	6	7%
Textile mill products	6	7
Apparel and related products	8	10
Paper and allied products	7	9
Printing and publishing	3	4
Chemicals and allied products	11	14
Leather and leather products	2	2
Stone, clay, and glass products	2	2
Primary metal products	3	4
Fabricated metal products	10	12
Non-electrical machinery	3	4
Electrical machinery	7	9
Transportation equipment	4	5

Table 3 (Cont.)

<u>Type of Industry</u>	<u>No. of Responses</u>	<u>Percentage</u>
Instruments & related products	1	1
Miscellaneous manufacturing	<u>8</u>	<u>10</u>
Total	81	100%

Source: Arthur D. Little, Inc.

2. Site Specifications

A number of questions were asked of the industrial firms in Jersey City regarding their site specifications and future intentions.

Fifty-seven percent of those answering the questionnaire answered that on the whole they were satisfied with their present Jersey City locations. The accuracy of this answer was corroborated by the fact that 52% of the respondents stated that if they were building a new plant today, they would do so in Jersey City and 61% stated that they would rebuild or expand on the same site in Jersey City if their site requirements could be met. In other words the answers to these three questions indicate that at least one out of every two manufacturing firms were satisfied with Jersey City as a place to do business and that they should like to remain here.

Although 64 percent of the respondents stated that their present buildings were adequate, 35 percent - a rather large amount - replied that their existing buildings were obsolete. This is not too surprising in view of the fact that 37 percent of the structures were built between 1901 and 1920 and thus are typically fifty years old while another 10 percent were built before the turn of the century. Indeed of the total building stock only 13 percent were built since 1950.

Most of the firms responding to the questionnaire have been established in Jersey City for some time. Indeed, the typical respondent has been operating in Jersey City for more than fifty years and almost 10 percent of the respondents were established in Jersey City before the turn of the century. The picture of the typical Jersey City firm as being an old one in terms of tenure is reinforced by the fact that only about 15 percent of the respondents established themselves in Jersey City since the end of World War II.

The present site represented a relocation of the firm from elsewhere in more than half of the cases (actually 56 percent). This suggests that the firms originally moved to Jersey City because of some positive comparative advantage which Jersey City had over other locations. The respondents were asked to indicate what this reason might have been, but no one answer predominated. In a few cases they left an obsolete building to move to Jersey City - in a few other cases they moved to be closer to their market and in a number of other situations, labor - either a lack of it or the fact that it was too expensive - produced a move to Jersey City.

About one-third of the firms moved to their present location from another site in Jersey City, while slightly less came from New York City. About 28 percent came from elsewhere in New Jersey and about 5 percent moved to Jersey City from other communities in New York.

In view of the fact that the typical Jersey City firm has been in the city a long time as we indicated above, a rather high percentage (about 40 percent) of the respondents rent, rather than own, their facilities. Thus this group has no fixed or firm commitment to continually conduct business in Jersey City and could be captured by another community relatively easily.

Perhaps the single most important fact to emerge from our survey was the indication that 62 percent of the respondents planned to expand their Jersey City operations in the next five to ten years. Moreover, 25 percent of this amount attached a probability of 75 percent or greater to their actions, and since 61 percent indicated a preference for a Jersey City site, this presents a large challenge to the city, particularly in view of the fact that there is such a large probability of this expansion occurring. We would, therefore, summarize this conclusion by stating that about one-quarter of all the existing establishments currently operating in Jersey City will enlarge their local operations with the next decade if their site requirements can be found in Jersey City.

There is a 3:2 preference for newly erected buildings rather than growth in an existing building and a 2:1 preference to rent rather than to buy amongst those firms who intend to expand.

Generally speaking these firms indicated a preference or willingness to rent building space at between 75¢ and \$1.00 per square foot although some stated an ability to rent at a price in excess of \$1.00 per square foot. As will be discussed later when we report on our industrial realtor interviews, such space - that in excess of \$1.00 per square foot - is available but not in any conspicuous amount and in view of the request for it, it is conceivable if not probable that an unmet demand exists in the industrial real estate market for such space.

No clear-cut pattern exists amongst those who were asked what they would pay for building space, if they intend to purchase it. About a quarter of the responses indicated that they could afford or would be willing to pay less than \$1.00 per square foot; another quarter stated between \$1.00 and \$3.00, while a third quarter said they would pay between \$4.00 and \$6.00 and a final quarter said they would pay in excess of \$6.00 per square foot.

This mobility which has been expressed in general and the proclivity or intention to expand in particular is not without precedent in Jersey City. Thus one-third of the respondents stated that they have enlarged their Jersey City operations in the past five years while only 2 percent indicated that there had been no change in their size.

Specifically, in the next five years we anticipate that there will be an enlargement of the existing facilities. Thus 18 percent of the respondents reported that their current building size was less than 10,000 square feet. By 1970 only 13 percent expect to be in this size space. Similarly there will be a reduction in users from 41 percent of the total to 33 percent for those using space of a size between 10,000 and 50,000 square feet. On the other hand those using a building with space between 50,000 and 100,000 should rise from 22 to 32 percent of the total users and those in excess of 100,000 square feet will also increase slightly.

In like manner, the land requirements will also increase and particularly in the mid ranges. Thus 1.7 percent of the respondents currently occupy a land area which is less than 5,000 square feet. By 1970 there will be none in this category. Those occupying land area of between 6,000 and 20,000 square feet will be about the same percentages in 1970 as they are now. Those occupying lots of 21,000 to 50,000 square feet will decline proportionally from 18 percent to 10 percent of

the total. On the other hand those occupying a land area of between 50,000 and 100,000 square feet will rise from 16 percent to 20 percent by 1970, while those in excess of this amount will be proportionately the same in 1970 as they are now.

The respondents also expressed the fact that their personnel needs would expand. At the present time 40 percent of those answering the questionnaire had less than 50 employees. By 1970 this group will decline to 20 percent of the total. On the other hand only 23% of the respondents have currently more than 150 employees; by 1970 this is expected to rise to 38 percent of the respondents and similarly by that date the proportion of those engaging between 100 to 149 employees is slated to almost double from 10 to 19 percent of the respondents.

The composition of the present work force is primarily factory workers with a heavy emphasis on skilled employees. That is, in more than half the cases the office staff numbered less than 10 employees while the factory typically had in excess of 25 employees; 22 percent of the respondents had between 26 and 50 employees, 19 percent between 51 and 100, and another 22 percent had in excess of 100 factory workers in their establishments.

In about 25 percent of the cases the skilled employees represented more than 70 percent of the total labor force in the establishment while the comparable figure for semi-skilled was 8 percent and for unskilled employees it was 19 percent. On the other hand in about 35 percent of the respondents' factories unskilled employment represented less than 30 percent of the labor force while semi-skilled accounted for 47 percent and skilled accounted for 44 percent of this category.

3. Industrial Realtors Survey

In order to understand some of the underlying patterns and trends of the market for industrial space we interviewed five industrial realtors.¹ We asked them the price of solid or filled, sewerred and watered industrial land in Jersey City and were told that it ranged from \$25,000 to \$40,000 per acre, depending upon location (that is roughly from 60¢ to \$1.00 per sq. foot). Naturally with rail and waterfront access, this price goes up to between \$1.10 and \$1.40 per square foot. In Liberty Park, the current asking price is about \$1.00 per square foot; at the foot of Johnson Avenue in the vicinity of the Jersey Central facilities it is 75¢ per square foot. In the area of the Lafayette Industrial Park, the price for land is about 50¢

¹A copy of this questionnaire may be found in Appendix IV.

per square foot whereas along Route 440 the price is slightly in excess of \$1.00 per square foot or about \$50,000 per acre. We were told, however, by at least one respondent that there is very little vacant land left and that which remains is to be found in a few very small, scattered sites.

The price of existing industrial buildings also varies in Jersey City depending upon the area in which the building is located as well as the type and condition of the building. For example, a 40 year old multi-story building in the vicinity of Tonnelle Square would sell for between \$1.50 and \$3.00 per square foot whereas a new 1-story air-conditioned structure would rent for between \$3.50 and \$4.50 a square foot. On the other hand less prestigious buildings may rent for considerably less. The old Western Union Building, for example, at Grand and Communipaw rents for 80¢ to 85¢ per square foot which is also the present asking price at Harborside. In the Caven Point Road area, the asking price is about \$1.00 per square foot while in the Holland Tunnel area (Industrial District 3) the price is 90¢ to \$1.00; at the Bali Building, however, the price is \$1.50 per square foot because the structure has all the modern conveniences. There is also a difference by floors; that is to say, in a building whose ground floor would rent for 75¢ to 90¢ per square foot, the first story would be about 85¢ to \$1.10 per square foot and loft space in the upper stories would be considerably less, i.e., 60¢ to 75¢ per square foot.

In order to purchase industrial buildings which would lease for between 90¢ and \$1.10 one would have to pay between \$6.00 and \$10.00 per square foot. One realtor who works in the entire northeastern New Jersey market told us that prices in Jersey City were comparable to other Hudson, Bergen and Essex County communities.

We were told that basically warehouse and distributing companies are seeking space in Jersey City as well as a variety of manufacturing firms. These manufacturers include apparel firms (especially knitting and fabric establishments), children's wear firms and other garment makers as well as printing and paper companies and other light manufacturers, packagers, fabricators and assemblers.

Only one of the six respondents indicated that there was no available space for such firms and even he hedged his answer to state that there was a relatively small amount of old

multi-story building space available. However, there appears to be a true shortage of modern one or two-story space on the market. That is, 80 percent of the realtors' requests from manufacturers are for 1-story space and there is only, perhaps, 200,000 square feet available. This is desired in blocks of from 5,000 to 100,000 square feet at the prices mentioned above.

The fact that manufacturers cannot find the type of space they want - (as opposed to what is available) - is, we were told, one of the primary reasons certain manufacturers choose not to locate or relocate in Jersey City. One-story space with room for expansion at a reasonable price is the most sought-after commodity in this market. The realtors told us, however, that other reasons were also cited by the manufacturers for not wanting to be situated in Jersey City. Among those reasons cited are high taxes, aesthetic appearance, inadequate type of labor, non-central location in the state, and an item which we will term reputation. That is, the political picture presents to some prospective companies a poor image or appearance. Whether or not there is any justification for such a claim is not relevant; the fact exists that the municipal government has the reputation among a number of out-of-town manufacturers for corruption, and this has tended to make certain firms leery of locating in Jersey City.

The tax problem appears to be more disturbing to distributors and wholesalers than to manufacturers, but generally speaking the reasons for rejecting Jersey City as a location do not vary by industry. One realtor mentioned that higher taxes was the price these firms had to pay for the privilege of locating in Jersey City which is proximate to both the Hudson Tunnel - i.e. New York City, and to the Jersey Turnpike - i.e. the hinterland.

Those firms which rejected Jersey City relocated to Carlstadt, Secaucus, North Bergen, East Rutherford, Moonachie, and to a much lesser extent Ridgewood, Hillside, Newark, Passaic, Paterson, Bayonne, Hoboken, as well as Middlesex County and northern Hudson County.

In Jersey City, we were told, taxes on a new industrial building are about 35¢ per square foot, while in Carlstadt they are about 18¢ per square foot; in Moonachie about 20¢ per square foot; in East Rutherford about 12¢ per square

foot; in Secaucus between 16¢ and 26¢ per square foot.² In comparison with leasing a building for about \$1.10 per square foot in Jersey City, the comparable cost is slightly less in Moonachie (about 90¢ per square foot), and a little less in Secaucus (about \$1.10 per square foot).

The price for space which firms are willing to pay is in accord with the price now being asked. That is to say, for a new building it ranges between 75¢ and \$1.30 per square foot (with air conditioning) on a rental basis and between \$2.00 and \$3.00 on a sale basis. In the rental range, warehousing can afford the low end...75¢ to 85¢ and manufacturing the mid and higher end. These market prices are net with taxes not over 20¢ per square foot. They do not otherwise vary by type of industry.

²The Jersey City Chamber of Commerce indicates taxes are 22¢ per square foot. The difference is probably due to an interpretation in measurement. Nevertheless, even using this lower rate, Jersey City possesses a relatively high rate.

D. The Forces Which Attract and Repel Industry

1. Areas of Concern: A Challenge to the City

In spite of the large expansion in existing facilities, which was indicated above, our survey suggests that there is more of a challenge to the city for action than an opportunity for complacency. This is especially so because a large number of respondents indicated an element of dissatisfaction in their attitudes towards doing business in Jersey City. For example, although 60 percent of the respondents indicated that street traffic congestion was not a problem, 38 percent indicated that their plant operating costs were increased by local street traffic congestion. The attention to street traffic reflects the fact that vehicles are such an important element in the inflow and outflow of goods to and from the factory. This is exemplified by the fact that in approximately 75 percent of the cases, trucks carry between 90 and 100 percent of the inbound raw materials and outbound finished products. Only 35 percent of the respondents used any rail facilities for inbound shipments and 25 percent for outbound shipments and these usually represented a small proportion of the total shipments of the manufacturers. That is to say in less than 25 percent of the cases rail carried less than 30 percent of the raw material inputs and finished product outputs. Water, parcel post and railway express shipments accounted for the other modes of goods being hauled in minute quantities.

The importance of trucks as a primary means of transportation is reiterated by the fact that 38 percent of the respondents stated that they had inadequate off-street loading area. Of significance also is the fact that 51 percent declared that they had inadequate off-street parking spaces.

In addition to concern about parking spaces and street traffic a large number of the respondents indicated some dissatisfaction with the labor picture. Sixty-three percent, for example, stated that some types of skilled employees were presently in short supply; 40 percent mentioned that some types of unskilled employees were in short supply. On the other hand 14 percent of the respondents felt that there was an oversupply of unskilled employees. The types of unskilled employees most frequently mentioned in short supply were general laborers and sewing machine operators while machinists, electricians, operators, and welders were the

most sought-after skilled employees, followed by maintenance men, printers, and office assistants.

This concern about personnel was expressed in another manner. The respondents were asked why they would select Jersey City as a city in which to build a new plant. Thirty-two percent said it was because of the favorable labor supply and labor conditions - but 22 percent stated that they would not want to locate a new plant in Jersey City today because of the labor conditions. Thus, on balance, the attitude regarding labor by business is favorable and a majority holds this position - but this majority is not a monopoly. The primary advantage mentioned by the respondents as a reason for doing business in Jersey City was the location, while the basic dissatisfaction was expressed first about taxes, secondly about labor as mentioned above, and finally about the quantity and condition of space.

These attitudes about taxes, labor and space were reinforced when we asked those respondents who were not satisfied with their present location in Jersey City why they took this position. The most popular assertion was that taxes were too high. This was mentioned by 28 percent. Closely on the heels of this reason was mention of an inadequate skilled labor supply (27 percent of the respondents), the need for more floor space (25 percent), and obsolete buildings (22 percent). Other reasons for dissatisfaction with the existing location in Jersey City which were prominently mentioned were poor truck access, labor costs too high, and an inadequate supply of unskilled labor.

A somewhat slightly different set of reasons was offered by the respondents when we asked the reasons why they would not rebuild or expand on their present site in Jersey City - assuming that their site requirements could be met. These answers reflected a greater concern with environmental factors. For example, although labor was once again the most frequent answer, there was an equal response indicating the need for more land. Other answers which were featured included criticisms of the neighborhood, congestion, drainage, parking, and vandalism, and these suggest a concern for the setting in which the plant is located.

In a larger context, the setting is Jersey City's primary asset in the competition for new industry. That is, almost one out of every two firms established themselves in

Jersey City because of the city's location. This factor of proximity - proximity to New York City and to the hinterlands is the outstanding asset of Jersey City and one which will not change over time. Other reasons were also offered for establishing operations in Jersey City; 15 percent of the respondents, for example, cited the quality and availability of the labor as a principal consideration while another 8 percent offered the availability of space as a contributing reason for attracting them to Jersey City.

In order to probe more deeply into their evaluation of Jersey City as a place in which to do business, the respondents were asked to compare Jersey City with other locations and to rank Jersey City with respect to nine items. It turned out that they evaluated Jersey City more favorably than other locations with respect to two items: closeness to market and labor costs; equal with respect to four items: labor conditions, closeness to raw materials, municipal attitudes, and rents or cost of space; and less favorably with respect to three items each having to do with taxes: real estate taxes, inventory taxes, and machinery and equipment taxes. Since the last two taxes are no longer in existence, it would seem that they are only vexatious as figments of the respondents' imagination; on the other hand, and more to the point, this also indicates the educational job which remains to be done since these business leaders appear to believe that these taxes still exist and are a deterrent to them in Jersey City. We reproduce on the following page Table 4, which shows the distribution of responses to this question.

Within Jersey City it was felt that a number of city services could be improved. The service which was most frequently mentioned was better snow removal, and this was followed by better police protection and improved sewage and drainage facilities. It is noteworthy that 40 percent of the respondents did not answer this question, indicating that they were satisfied with the current level of city services.

A comparable percentage also failed to comment when they were asked how the neighborhood surrounding their plant could be enhanced. One-third of those who did choose to reply, however, responded by stating that their area

Table 4

A Comparison of Jersey City And Other Locations
Percentage Distribution

<u>Item</u>	<u>Jersey City More Favorable</u>	<u>Jersey City Less Favorable</u>	<u>Jersey City Equal</u>	<u>No Answer</u>	<u>Total</u>
Labor costs	39	9	38	14	100
Labor conditions	32	18	37	14	100
Real estate taxes	14	52	18	17	100
Inventory taxes	13	44	20	23	100
Machinery and equipment taxes	14	40	22	25	100
Closeness to market	58	4	28	10	100
Closeness to raw materials	37	5	45	13	100
Municipal attitudes	28	19	33	20	100
Rents or cost of space	23	20	33	24	100

Source: Arthur D. Little, Inc.

needed cleaning up, while 16 percent of the respondents wanted better police protection and 13 percent requested improved streets and roads.

On the more positive side, 29 percent stated that they were particularly happy about the police services, 22 percent liked especially the fire services and 8 percent responded affirmatively concerning the city's attitude toward business. On the other hand, it should be mentioned that 59 percent of those returning the questionnaire failed to cite any particular city service or policy which particularly impressed them.

The respondents became more responsive when asked to name what specific steps the city of Jersey City could take to facilitate their business. Almost half of the respondents mentioned lowering taxes and one-fifth requested that the streets be fixed. Other actions which were frequently mentioned included the following: better transportation, improved sewers, educational facilities to train workers, improved traffic lights and control, and more parking.

2. Metropolitan Dependencies

Most of Jersey City's linkages are with other cities. The preponderance of manufacturers, for example, go outside of Jersey City to acquire their raw materials. Less than 15 percent of the respondents acquired 25 percent or more of their inputs within Jersey City. In fact they typically acquired considerably less than 25 percent of their raw materials in the local Jersey City market.

By the same token, less than 15 percent of the respondents shipped 25 percent or more of their finished product to other producers or manufacturers located in Jersey City. The typical manufacturer shipped the vast majority of his product outside of the city. Similarly it was reported that Jersey City manufacturers sold more than 25 percent of their finished product to retailers or wholesalers who were located in Jersey City in less than 2 percent of the cases. Thus, the overwhelming bulk of locally produced merchandise which is destined for resale is sold outside of Jersey City.

On the other hand, Jersey City manufacturers appear to rely more extensively on other Jersey City firms to supply them with business services. Thirty-seven percent of the respondents, for example, purchase all of their banking services and office supplies locally, almost 30 percent have complete local legal services, and more than 15 percent rely exclusively on local accounting services. In only 40 percent of the cases are less than 50 percent of the banking services local in origin while the comparable percentage for legal services is 64, and it is 82 percent and 53 percent respectively for the local purchase of less than 50 percent of the accounting service and office supplies.

E. The Changing Economic Base

1. Introduction

With increasing regularity, urban and regional economists have come to eschew the conventional economic base studies as a means with which to analyze and forecast the economic growth of urban areas.¹ As such studies have become increasingly sophisticated (and costly) there has come to be a realization that they are not self-fulfilling prophecies and that the uncertainties of time and the shifting sands of national economic policies will distort, if not disprove, any long-range forecast for an area as small as a city. Nevertheless urban planners require economic projections and therefore we are submitting a set of such forecasts in this section. The reader should be aware, however, of the fact that there is nothing final or sacrosanct about these estimates. That is, we wish to emphasize the fact that these data should be considered illustrative of a possible continuum rather than definitive in any narrow or fixed sense. Moreover, one should bear in mind that there is a range surrounding each of the numbers and that, to say the least, these data are subject to change.

In the next section we present some background information about Hudson County and Jersey City in order to place the projections in context. Hudson County data is featured since more of it is available. In addition, most of the published data concerning employment change, for example, pertaining to Jersey City relates to Jersey City as a place of residence rather than as a place of work, and since 44 percent of the Jersey City labor force does not work in Jersey City these data are useless for our purposes.² Another reason for highlighting Hudson County data is because the composition of employment in Jersey City is not dissimilar from the composition of the County's employment.

¹See for example, Richard Siegel, "The Economic Base and Multiplier Analysis", Urban Affairs Quarterly, Vol. II, No. 2, December, 1966.

²Jersey City Division of Planning, Comprehensive Planning Program Report No. 5, Economic Conditions, p. 6 See also Table 5 on p. 11.

2. 1950 to 1960: A Background Decade of Change

One of the small but salient features of data that we have concerning Jersey City's economy is to be found in the Eco-nomic Conditions report and we reproduce below part of its page 22.

"The overall manufacturing trends in Jersey City also are not particularly promising. The New Jersey Division of Employment Security reports that between 1954 and 1964 "covered" manufacturing employment in Jersey City decreased by 12,491, a decline of 30.6 percent.

Industrial Employment in Jersey City, 1954-1964

			Change In Employment 1954-1964	
	<u>1954</u>	<u>1964</u>	<u>No.</u>	<u>%</u>
No. of Workers*	40,829	28,338	-12,491	-30.6
Total establishments	562	503	- 59	-10.5
Employees per establishment	72.6	56.3		

*Employees covered by industrial employment

Source: New Jersey Division of Employment Security

The above data indicates that the number of industrial establishments in the City decreased by 59 firms (10.5%). The ratio of total employment to total establishments declined from 72.6 to 56.3 employees per establishment. The industries that have ceased operation or moved out of Jersey City provided greater employment per establishment than those moving into the City."

This indicates quite clearly that both industrial establishments and the number of industrial workers has declined in recent years and the average number of workers per establishment has decreased as well. That is to say the typical Jersey City plant is smaller than it used to be. During the 1950 to 1960 period, Hudson County experienced a similar trend as shown in Table 5 on the following page.

The table, which is taken directly from Page 7-24 of the study by the U.S. Department of Commerce, Office of Business Economics' publication, Growth Patterns in Employment by County 1940-1950 and 1950-1960 (Volume 2 Mideast)(1965) contains a number of unique features and recognizes specifically the differential (industrial mix as well as regional) growth factors.

Table 5

Hudson County

Industry	Employment in			Components of Employment Change									
				1940-1950			Total Change	Octant code	1950-1960			Total change	Octant code
	National growth	Industrial mix	Regional share	National growth	Industrial mix	Regional share							
									(A)	(B)	(C)		
1 Agriculture	528	619	230	141	-236	186	91	6	96	-334	-151	-389	8
2 Forestry and fisheries	25	46	15	7	-3	17	21	3	7	-19	-19	-31	F
3 Mining	68	150	90	18	-17	81	82	3	23	-68	-15	-60	B
4 Construction	9,971	11,197	9,219	2,659	4,036	-5,468	1,227	5	1,733	-572	-3,140	-1,979	F
5 Food and kindred products mfg.	8,058	9,722	10,005	2,149	97	-581	1,665	5	1,505	1,303	-2,525	283	5
6 Textile mill products mfg.	6,300	5,586	3,985	1,680	-1,196	-1,198	-714	7	865	-2,154	-312	-1,601	B
7 Apparel mfg.	12,562	16,853	15,912	3,350	810	132	4,292	2	2,609	-1,100	-2,430	-941	F
8 Lumber, wood products, furniture mfg.	2,237	1,637	2,106	596	1	-947	-400	5	284	-474	519	329	F
9 Printing and publishing mfg.	4,816	5,881	5,741	1,284	414	-633	1,065	5	910	1,076	-2,108	-140	5
10 Chemicals and allied products mfg.	7,950	9,018	7,761	2,120	1,839	-2,891	1,068	5	1,396	1,411	-4,064	-1,257	5
11 Electrical and other machinery mfg.	10,444	15,184	20,797	2,785	7,070	-5,115	4,740	4	2,351	4,724	-1,461	5,614	4
12 Motor vehicles and equipment mfg.	1,816	2,050	1,314	484	446	-698	234	5	317	-382	-471	-736	F
13 Other transportation equipment mfg.	6,652	2,639	2,150	1,774	2,031	-7,018	-3,813	5	440	2,466	-3,594	-688	F
14 Other durable goods mfg.	33,521	35,766	25,932	8,948	2,085	-8,778	2,245	5	5,537	1,168	-16,539	-9,834	5
15 All kinds of railway express	12,593	12,231	7,035	3,358	-576	-3,144	-362	7	1,893	-5,081	-1,259	-5,197	B
16 Trucking and warehousing	4,795	6,544	8,406	1,279	583	-113	1,749	4	1,013	931	-82	1,862	4
17 Other transportation	8,399	10,026	8,359	2,240	2,175	-3,317	1,628	5	1,552	-1,277	-1,942	-1,687	F
18 Communications	3,492	4,467	3,834	931	1,005	-1,821	175	4	692	0	-1,324	-632	F
19 Utilities and sanitary service	3,630	3,985	3,294	968	638	-1,251	355	5	617	-42	-1,266	-691	F
20 Wholesale trade	6,537	10,989	8,829	1,742	2,430	286	4,458	2	1,701	-419	-3,442	-2,160	F
21 Food and dairy products stores	10,967	9,651	7,478	2,923	-1,242	-2,992	-1,311	7	1,494	-1,686	-1,981	-2,173	F
22 Eating and drinking places	7,061	8,047	6,969	1,883	1,123	-2,620	986	5	1,246	-728	-1,595	-1,077	F
23 Other retail trade	18,290	19,156	15,510	4,877	2,205	-6,218	864	5	2,965	367	-6,976	-3,644	5
24 Finance, insurance and real estate	16,577	17,552	15,755	4,420	664	-4,109	975	5	2,717	4,355	-8,870	-1,798	5
25 Hotels and other personal services	10,325	8,335	7,038	2,753	-1,701	-3,042	-1,990	7	1,290	-932	-1,655	-1,297	F
26 Private households	4,574	2,315	1,815	1,220	-2,586	-895	-2,259	8	358	33	-892	-501	5
27 Business and repair services	4,562	5,622	6,282	1,211	1,123	-1,254	1,080	5	870	403	-614	659	5
28 Entertainment, recreation services	1,709	1,805	1,416	456	-35	-325	96	7	279	-250	-419	-390	F
29 Medical, other professional services	17,255	19,790	21,568	4,601	2,998	-5,063	2,536	5	3,064	8,407	-9,643	1,778	5
30 Public administration	8,846	11,502	11,543	2,359	3,777	-3,480	2,656	4	1,781	1,369	-3,119	41	5
31 Armed forces	0	1,049	861	0	0	1,049	1,049	4	162	562	-712	-188	5
32 Industry not reported	6,224	3,654	12,116	1,660	-290	-3,940	-2,570	7	566	7,092	805	8,463	5
Total	250,754	273,466	253,425	66,986	31,680	-75,828	22,718	5	62,333	19,379	-81,754	-20,042	5
				Total net relative change (H) (Sum of totals Cols. E and F)				-44,148	Total net relative change (N) (Sum of totals Cols. K and L)				-62,375

Table 5 indicates that in the 20-year period, 1940-1960, in Hudson County - and one might add with all likelihood in Jersey City as well - the following industries registered significant employment gains: food and kindred products, electrical and other machinery which doubled, and trucking and warehousing which also doubled. In the 10-year period, 1950-1960, to this list should be added the lumber, wood products, and furniture manufacturing industry. In terms of significant industries in Jersey City and Hudson County, we find the following to be important in addition to the ones previously mentioned above: apparel manufacturing,

paper and allied products, leather and leather products, stone, clay and glass products, fabricated metal products, instruments and related products and miscellaneous manufacturing. All the aforementioned industries in this paragraph are important because it is in this list of industries that one will find the basis for Jersey City's future economic growth.

Jersey City suffers from the fact that not only is the plant old in which most of the industries are operating, but also Hudson County's economic growth has been declining relative to the regional growth patterns. Thus in Hudson County (and presumably Jersey City as well) employment in every industry in Table 5 lagged behind the comparable regional growth rate with the exception of the lumber and wood products industry and the catch-all category known as "industry not reported". Moreover, the growth in most industries in Hudson County has also lagged behind the national growth rates with a few exceptions such as the food and kindred products industry, the printing and publishing industry, the chemicals and allied products industry, the electrical and other machinery industry, the other transportation equipment industry and the other and miscellaneous manufacturing industries, and trucking and warehousing. These then are the industries which have been growing faster (or declining more slowly) in Hudson County and we suspect in Jersey City as well than they have by and large in the nation in the 1950 to 1960 period. They are the industries, therefore, that represent potential for further development in Jersey City.

Of all the aforementioned industries, there are two - electrical and other machinery and trucking and warehousing - whose rate of growth was greater in Hudson County than in either the Northeast region (New York, New Jersey, Pennsylvania, Maryland, and the District of Columbia) or in the country as a whole in this period and these two activities should be singled out for careful attention in the future. The other industries mentioned in the preceding paragraph had a regional growth rate which was in excess of the national growth rate for that industry as well as in excess for all industries taken together.

All the other manufacturing industries in Hudson County had negative growth rates which were greater than the overall industrial growth rates for all industries as well as for the comparable growth rates of the specific industries. That is to say they did poorer or less well or declined relatively more in Hudson County than they did in the region.

The total change in Hudson County may be interpreted from Table 5 in the following fashion. Between 1950 and 1960 there was a decline in employment of approximately 20,000 persons. But if employment in Hudson County had changed in this decade in the way all employment in the United States has increased, there would have been an increase of 42,000 employees in Hudson County. And if employment in the specific industries in Hudson County had grown in the same fashion as these specific industries had grown nationally, there would have been a net increase of 19,000 persons. However, industries in Hudson County expanded less rapidly than in the Northeast region as a whole. That is, Hudson County was not doing as well as the region's performance in general. If the industries had declined at the same rate as Hudson County had declined, there would have been a loss of about 82,000 employees in this period. The realized change in all employment in Hudson County was 62,000 less than than would have occurred if the overall national rate for all industries combined has prevailed.

Again we will explain the change in one industry by reference to Table 5. Between 1950 and 1960 the contract construction industry in Hudson County lost almost 2,000 employees. If employment in this industry had increased at the national rate for all industries in the United States, there would have been an increase of 1733 persons. Moreover, if employment in construction in Hudson County had increased at the rate of the construction industry in the United States, there would have been a decline of only 572 employees since construction generally was a fast growing industry. But contract construction expanded less rapidly in Hudson County than in the region as a whole. That is, Hudson County did not perform in general as well as the region did. If contract construction had grown at the rate of Hudson County's growth, contract construction would have lost about 3,000 employees. The realized change in contract construction was 3712

(3,140 - 572 = 3,712 - 1,733 = 1,979) less than what would have occurred at the overall rate for all industries combined. Each of the other 31 industries may be similarly interpreted from the components of the employment change portion of Table 14.

3. 1966 - 1976: A Future Decade of Change

We list below in Table 6, the 1966 employment in Jersey City in most industries. To this figure, we have added a percentage to indicate change. Based originally on the change given in Table 5, this percentage also incorporates our judgment - since it assumes that the recommendations suggested in the succeeding sections will be adopted. It further assumes that the industrialists will expand as indicated in the questionnaire, that long-run national economic trends will evolve as currently anticipated, and also that technology will play an ever-increasing role.¹ This forecast is also based on the historical growth patterns as explained in the preceding section and keyed as well to the overall changes in employment which are expected for Hudson County (see Table 1) for the reasons given in the introduction to this section.

Table 6

Current and Estimated Employment Projections Jersey City: 1966-1976

<u>Industry</u>	<u>1966 Employment</u>	<u>Estimated Decade Percent Change</u>	<u>Approximate 1976 Estimated Employment</u>
Food and kindred products	1,928	+ 15%	2,200
Textile mill prod.	717	even	700
Apparel and related products	2,017	+ 10	2,200

¹The basis for our assumptions concerning technological change and industrial trends may be found in: U.S. Dept. of Labor: Technological Trends in Major American Industries, Bulletin No. 1474, Feb. 1966 and U.S. Dept. of Labor: America's Industrial and Occupational Manpower Requirements, 1964-75.

Table 6 (Cont.)

<u>Industry</u>	<u>1966 Employment</u>	<u>Estimated Decade Percent Change</u>	<u>Approximate 1976 Estimated Employment</u>
Lumber and wood products	260	+ 10%	285
Furniture and fixtures	282	+ 15	315
Paper and allied products	1,469	even	1,450
Printing and publishing	882	+ 15	1,000
Chemicals and allied products	2,437	+ 5	2,550
Petroleum and coal products	89	+ 10	100
Rubber and plastic products	703	+ 15	800
Leather and leather products	592	+ 10	660
Stone, clay and glass products	801	+ 5	840
Primary metal prod.	847	- 10	760
Fabricated Metal products	1,249	- 4	1,200
Non-electrical machinery	2,123	+ 20	2,500
Electrical machinery	3,909	+ 30	5,100
Transportation equipment	813	+ 5	850
Instruments and related products	277	+ 15	320
Other and Misc. manufacturing	1,327	+ 20	1,600
Warehousing	<u>403</u>	<u>+ 25</u>	<u>500</u>
Total	23,125	+ 12	25,930

Source: Column 1 - Area Development Council of Jersey City, 1966 Industrial Directory: Columns 2 and 3, Arthur D. Little, Inc.

The conversion of future employment to land and requirements necessitate that established ratios be employed. We have, therefore, utilized such ratios from studies that we and others have made in a variety of other comparable cities. The results of this analysis are shown below in Table 7.

Table 7			
Estimated Land Area and Requirements Jersey City, 1976			
<u>Industry</u>	<u>Estimated 1976 Employment</u>	<u>1976 Est. Site Area (Acres per Employee)¹</u>	<u>Total Land Area Required by 1976 (Acres)</u>
Food & kindred prod.	2,200	0.020	44
Textile mill prod.	700	0.015	11
Apparel & related prod.	2,200	0.014	31
Lumber & Wood prod.	285	0.075	21
Furniture & fixtures	315	0.090	28
Paper & allied prod.	1,450	0.035	51
Printing & publishing	1,000	0.026	26
Chemicals & allied prod.	2,550	0.028	72
Petroleum & coal prod.	100	0.028	3
Rubber & plastic prod.	800	0.020	16
Leather & leather prod.	660	0.020	13
Stone, clay & glass prod.	840	0.022	19
Primary metal products	760	0.050	38
Fabricated metal prod.	1,200	0.055	66
Non-electrical mach.	2,500	0.035	88
Electrical machinery	5,100	0.025	128
Transportation equip.	850	0.018	15
Instruments & related products	320	0.020	7
Other & misc. mfg.	1,600	0.020	32
Warehousing	<u>500</u>	<u>0.080</u>	<u>40</u>
Totals	25,930	-	759

Source: Arthur D. Little, Inc.

¹These ratios have been adjusted to compensate for the fact that they refer to a decade hence.

At the present time approximately 700 acres are used for industrial purposes in Jersey City. The recently adopted 1966 Master Plan has allocated 2,276 acres for long-range industrial use. Therefore, our estimate of 759 acres likely to be in use would appear most realizable and practical. In Jersey City currently the average density is 55 employees per acre (these range from thirty-five per acre in Area eight to 141 per acre in Area three) while plants which are situated in outlying industrial areas and in suburban industrial parks average about 40 acres per employee. Our 1976 total land requirements for Jersey City average out to a ratio of 35 employees per acre which would appear to be very desirable.

To summarize this section we believe that Jersey City can and should sustain a modest industrial growth in the next decade. This growth rate is 1.2 percent per year. The industries which will continue to decline are primary and fabricated metal products while electrical machinery, non-electrical machinery, and warehousing will show the largest relative and absolute growth. By the end of the decade approximately 760 acres will be required for industrial purposes.¹

4. Site Attributes and Requirements

The economic growth suggested in the preceding section was developed from a projection of historical ratios, from an examination of future building intentions on the part of the respondents to our survey, and by studying long-range national and regional economic growth rates in terms of the general industrial categories listed in Tables 13 and 14. These categories are too broad or general, however, for specific recommendations concerning site requirements which were asked of us. Moreover, missing from the preceding analysis was any reference to the one ingredient which differentiates Jersey City from other cities in New Jersey. This is its unique location in the heart of the rich New York market and closer to downtown Manhattan than most sections in Brooklyn and all of the Bronx, Queens or Staten Island. Therefore, in order to capitalize on this proximate location we have further screened the growth industries mentioned in the preceding section to arrive at 47 specific types of manufacturing activity

¹ This is not meant to suggest that only 60 additional acres for industrial purposes are required. Of the 700 acres currently in use, much houses old structures which will have to be torn down and replaced. Therefore, the 60 acres is a net figure and implies that industrial redevelopment will consume acreage far in excess of this figure.

whose locational requirements necessitate that they locate in or near large markets. We believe that Jersey City's future economic growth will be dependent to a large measure on how successful it is in attracting firms engaged in these types of activities to locate in the city whose official nickname is "The City That Has Everything For Industry."

In order that the Redevelopment Authority might plan more intelligently for these industries, we have indicated below in Table 8 their name, of course, as well as the characteristics of typical plants. We also indicate on Table 8 the requisite special services needed by these industries such as railroad or marine access. Each of these industries requires shipping, warehousing and goods handling facilities but these vary in accordance with the specific proclivities of the entrepreneurs and engineers involved in the actual design of the structure. As a rule of thumb, however, these storage and distribution facilities will occupy between 15 and 25 percent of the structure's floor space.

The definition of high, medium and low in reference to water, bay size and electrical demand, which are to be found on Table 8, follows.

1. Water
low - 10 to 20,000 gallons per day
medium - 20 to 80,000 gallons per day
high - above 80,000 gallons per day
2. Bay size
low - below 20 by 20 feet
medium - 20 by 20 to 60 by 60 feet
high - above 60 by 60 feet
3. Electrical demand
low - 30 to 50,000 kwh per month
medium - 50 to 500,000 kwh per month
high - above 500,000 kwh per month

Table 8

INDUSTRY	LAND AREA (ACRES)	BLDG. AREA (SQ. FT.)	MULTI- STORY	SPECIAL FOUNDATION	MARINE ACCESS	RAIL ACCESS	ELECT. DEMAND	SOLID WASTE PRODUCTION	SEWAGE PRODUCTION	WATER DEMAND	BAY SIZE	TOTAL COST
CUSTOM MEAT DRESSING	6.5	210,000	NO	NO	NO	YES	LOW	M	H	H	L	
SOFT DRINKS, ETC.	9	118,000	YES	NO	NO	YES	LOW	L	M	H	M	3,000,000
POULTRY DRES- SING, PACKING	0.6	4,100	NO	NO	NO	NO	LOW	M	H	H	L	
MILK AND MILK PRODUCTS	2.1	90,000	YES	NO	NO	YES	LOW	M	H	H	M	
ICE CREAM AND ICE MANUFACTURE	2.6	85,000	YES	NO	NO	NO	LOW	M	H	H	M	
CREAMERY SPEC. PRODUCTS	1.5	22,000	NO	NO	NO	YES	LOW	M	H	H	M	
FROZEN FOODS	4.2	100,000	YES	YES	YES	YES	HIGH	M	H	H	M	
BAKERY PRODS.	1.7	60,000	YES	YES	NO	YES	HIGH	L	L	M	M	
CIGAR MANF.		6,500	YES	NO	NO	NO	LOW	L	L	L	L	
ENVELOPE MANUFACTURE		4,800	YES	NO	NO	YES	LOW	L	L	L	M	
PUBLISHING, MAGAZINES, ETC.		90,000	YES	YES	YES	YES	LOW	L	L	L	M	
LITHOGRAPHING, BINDING	0.75	10,000	YES	YES	YES	YES	LOW	L	L	L	M	

INDUSTRY	LAND AREA (ACRES)	BLDG. AREA (SQ. FT.)	MULTI- STORY	SPECIAL FOUNDATION	MARINE ACCESS	RAIL ACCESS	ELECT. DEMAND	SOLID WASTE PRODUCTION	SEWAGE PRODUCTION	WATER DEMAND	BAY SIZE	TOTAL COST
BLANK BOOK, RULING		6,000	YES	YES	YES	YES	LOW	L	L	L	M	
LIBRARY AND LOOSE LEAF MANUFACTURE		50,000	YES	NO	YES	YES	LOW	L	L	L	M	
COMMERCIAL PRINTING		17,000	YES	YES	NO	YES	LOW	L	L	L	M	
MISC. PUBLISHING		5,000	YES	YES	NO	NO	LOW	L	L	L	M	
WOOD PARTI- TIONS, SHELVES	13.2	200,000	YES	NO	YES	YES	LOW	M	L	L	M	
OFFICE AND STORE FIXTURES	7.2	135,000	YES	NO	YES	YES	LOW	M	L	L	M	
WOODEN BOXES, SHELVES	4	40,000	NO	YES	YES	YES	LOW	M	L	L	M	200,000
BARRELS, TUBS, KEGS	5	45,000	NO	YES			LOW	M	L	L	M	
MIRROR AND PIC- TURE FRAMING	3.5	39,000	YES	NO	NO	NO	LOW	M	L	L	L-M	

Table 8

INDUSTRY	LAND AREA (ACRES)	BLDG. AREA (SQ. FT.)	MULTI- STORY	SPECIAL FOUNDATION	MARINE ACCESS	RAIL ACCESS	ELECT. DEMAND	SOLID WASTE PRODUCTION	SEWAGE PRODUCTION	WATER DEMAND	BAY SIZE	TOTAL COST
MISC. WOOD PRODUCTS	1.4	4,400	YES	NO	YES	YES	LOW	M	L	L	M	
PAPER BAGS, CONTAINERS	3	48,000	YES	NO	YES	YES	LOW	M	L	L	H	
GLASS PRODUCTS NOVELTIES		12,000	YES	NO	YES	YES	LOW	M	L	L	L	
CONCRETE PRODUCTS	10	310,000	NO	YES	YES	YES	LOW	L	L	M	H	
4 PAPER COATING AND GLAZING	6	160,000	YES	NO	YES	YES	LOW	L	L	L	M	
WALL PAPER	4.4	70,000	YES	YES	YES	YES	LOW	L	L	L	M	
STATIONARY, ART GOODS	0.4	24,000	YES	NO	YES	YES	LOW	L	L	L	L-M	
FIBER CASES, TUBES & DRUMS	3.1	30,000	YES	YES	YES	YES	LOW	L	L	L	H	
DIE-CUT PAPER	9.2	300,000	YES	YES	YES	YES	LOW	L	L	L	M	
PAVING MIX AND BLOCKS	6	150,000	NO	YES	NO	YES	LOW	M	L	M	H	
ROPE, BELT, ETC.	1.5	55,000	NO	YES	NO	YES	LOW	M	L	L	H	

Table 8

INDUSTRY	LAND AREA (ACRES)	BLDG. AREA (SQ. FT.)	MULTI- STORY	SPECIAL FOUNDATION	MARINE ACCESS	RAIL ACCESS	ELECT. DEMAND	SOLID WASTE PRODUCTION	SEWAGE PRODUCTION	WATER DEMAND	BAY SIZE	TOTAL COST
BRICKS, TILE, BLDG. MATERIAL	13.3		NO	YES	YES	YES	LOW	M	L	M	H	100,000
SEWER PIPES	11.5	310,000	NO	YES	YES	YES	LOW	L	L	M	H	
MACHINE PARTS	10	125,000	YES	YES	YES	YES	HIGH	M	L	L	M	
SHEET METAL WORK	0.5	9,600	NO	NO	YES	YES	HIGH	L	L	L	M	
STORAGE, BATTERIES, ETC.	7	200,000	YES	NO	YES	YES	MODERATE	M	M	M	M	
SOUVENIERS, PLATED WARE	1.5	55,000	YES	NO	YES	YES	LOW	L	L	L	L-M	
VENDING MACHINES	10	260,000	YES	NO	YES	YES	LOW	L	L	L	M	3,000,000
SCRAP METAL	9	85,000	NO	YES	NO	YES	MODERATE	M	L	L	H	
MOLDED PLASTICS	4	29,000	YES	YES	YES	YES	MODERATE	L	L	L	M	
CHEMICALS	10	210,000	YES	YES	YES	YES	HIGH	L-H	L-H	L-H	L-H	1,250,000
SMALL EQUIP- MENT SERVICING	12	100,000	NO	NO	NO	YES	LOW	L	L	L	L	3,000,000
MARINE REPAIRS	38.4	240,000	NO	YES	YES	YES	HIGH	L-M	L	M	H	

Table 8

INDUSTRY	LAND AREA (ACRES)	BLDG. AREA (SQ. FT.)	MULTI- STORY	SPECIAL FOUNDATION	MARINE ACCESS	RAIL ACCESS	ELECT. DEMAND	SOLID WASTE PRODUCTION	SEWAGE PRODUCTION	WATER DEMAND	BAY SIZE	TOTAL COST
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RUBBER PRODUCTS
RESEARCH FACILI-
TIES
APPAREL

1.8
2
.5

50,000
10,000
10,000

YES
YES
YES

NO
NO
NO

NO
NO
NO

NO
YES
NO

HIGH
MODERATE
MODERATE

L-M
L
L

L-H
L-H
L

L-H
L-H
L

H
M
L

L = LOW
M = MEDIUM
H = HIGH

*Where data on several plants were available and average site condition was used

II. AN ANALYSIS OF JERSEY CITY'S WATERFRONT WITH REFERENCE TO INDUSTRIAL RENEWAL

A. Introduction

This section analyzes the prospects for seven waterfront areas in Jersey City.¹ In six of these, we inventoried the major facilities in each district, indicated the condition of each item, evaluated the future potential use of each facility and indicated the number of years of life remaining and, finally, expressed what the highest and best use of each area might be. In addition, we have prepared this condition inventory on a series of maps in detailed form which we have submitted separately.

B. An Analysis of Each Area

1. Area I

This area comprises the Erie-Delaware and Lackawana freight yards and is bounded by Henderson Street, Twelfth Street, the Hudson River and the Hoboken city line.

<u>Major Facility</u>	<u>Con- dition</u>	<u>Function- ing</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Pier 3	Fair	yes	10-20	Pier
4	Good	yes	15-20	Pier
5	Very poor	no	0-3	Razed
6	Very, very poor	no	0-3	Razed
Transfer Piers				
1	Poor	no	0-4	Razed
2	Poor	no	0-4	Razed
3	Poor	no	0-4	Razed
4	Poor	no	0-4	Razed
5	Poor	no	0-4	Razed
6	Poor	no	0-4	Razed
7	Very poor	no	0-4	Razed
8	Poor	yes	10-20	Pier
9	Fair	yes	15-25	Pier
10	Fair	yes	20-40	Pier
Back-up Yards (Behind Transfer Piers)				
	Fair	Some	10-20	Railroad Yards
Back-up Yards (Behind the Waterfront)				
	Good	yes	30-80	Railroad Yards

Our best estimate is that the highest and best use of this land would be for it to continue as a railroad marshalling

¹ The location of these areas may be found in Figure 1 on page 59.

yard and pier complex. If the Lehigh Valley joins the Erie-Lackawana system as a result of the mergers (and we believe that this is a distinct possibility) there will be an even greater need than now appears extant for this area to be used in this manner. The piers which we have indicated above as having a limited life (i.e., piers 5,6,7 and transfer piers 1-6) should be razed and replaced by modern facilities which are suitable for containerization.

2. Area II

This area consists primarily of the old Erie Railroad Passenger Station and associated back-up yards and piers. It is bounded by Henderson Street, Twelfth Street and the Hudson River and extends approximately 100 feet south of Pavonia Avenue.

<u>Major Facility</u>	<u>Con- dition</u>	<u>Func- tioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Pier 9	Fair-good	yes	20-30	Pier
Pier 8	Fair	yes	5-15	Eventual
		(partially)		razing
3 Bridge	Good	yes	10-25	Bridge
Floats				Float
Erie Ferry	Abandoned	no	0	Razed
Slips				
Tug Boat Repair				
Dock	Fair	yes	20-30	Dock
Back-up	Fair	yes (not used	20	See below
Yards		Extensively)		
Freight	Fair-poor	yes	20-30	See below
Offices				

In our judgment the highest and best eventual use for this area would be for moderate and higher priced high-rise housing. Located adjacent to both the Pavonia Station of the Port Authority Trans-Hudson rail facilities (with a brief ride to the new World Trade Center) and the Holland Tunnel, this area has a locational advantage for residential development which is difficult to surpass in the region. Obstacles to this type of development are the cold storage warehouse of the Mid-Hudson Warehouse Company and the old brick freight offices of the Erie Railroad on the south side of Pavonia Avenue. These two land uses should be phased out over a period of time. Pier 9 is also an obstacle. One of three truly functioning piers along the Jersey City waterfront, its abandonment would not make economic sense. Fortunately, it is located on the periphery of the area

with its own egress and hence should not interfere with the eventual residential character of the area. An important consideration, of course, is the attitude of the Erie-Delaware Lackawana Railroad. Although they may not be disposed to divesting themselves of this area in the short run, we feel that this attitude will probably not prevail over the long run.

We should point out that at present Federal funds are available to pay for the destruction of dangerous residential buildings through the demolition grant program. It is not inconceivable that this program would be extended to non-residential buildings and piers by the end of the Jersey City Community Renewal Program and we suggest that the Redevelopment Agency and the Planning Division personnel, monitor this situation to avail themselves of the requisite funds (if possible) for the clearance of the obsolete piers and ferry slips in Area 2 and elsewhere if this should be made a redevelopment area.

3. Area III

This area comprises primarily the Pennsylvania Railroad Yards at Harsimus Cove. It extends from approximately 100 feet south of Pavonia Street to Bay Street and from Henderson Street to the Hudson River.

<u>Major Facility</u>	<u>Con- dition</u>	<u>Func- tioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Stock yard pier	Fair	no	10-25	Renovated
Transfer Bridges 8 and 9	Good	yes	25-50	Transfer bridge
Pier M	Burned down	no	0	None
Transfer Bridge 7	Excellent	yes	50-75	Transfer bridge
Transfer Bridge 5	Removed	no	0	None
Pier L	Burned down	no	0	None
Pier K	Very, very poor	yes	2-5	Razed
Pier J	Burned down	no	0	None
Transfer Bridge 3	Fair	yes	10-20	Transfer bridge
Transfer Bridge 4	Fair	no	10-20	Transfer bridge

<u>Major Facility</u>	<u>Con- dition</u>	<u>Func- tioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Pier H	Fair to poor	no	5-10	Indeterminant; probably re- furbished as a pier.
Back-up yards	Fair-good	yes	20-50	See below

Our best estimate is that the use of this area in the immediate future would be to continue to use it as a reserve railroad yard. The Pennsylvania Railroad has indicated that they have no intention at this time, of releasing these facilities. The ball ground back-up yards are being used to handle perishable fruit and vegetables moving into Manhattan. Some westbound movement is also assembled in this area. The two finest transfer bridges (that we noted in Jersey City) are to be found in this area. We would suggest that the stock yard pier (which is most durable and built with concrete sidings and earth fill) be renovated and refurbished and put to some functional use. (It might even be used for containerization). Pier H should also be refurbished and put to greater use or else razed. At present it is not being used to any great extent.

4. Area IV

Area IV comprises Harborside Terminal, the Exchange Place waterfront, and the Colgate Palmolive Company waterfront. It extends roughly from Bay Street on the north to the Little Basin and from the Hudson River on the east to Hudson Street (south of Montgomery Street) and/or Washington Street north of Montgomery Street, on the west.

<u>Major Facility</u>	<u>Con- dition</u>	<u>Func- tioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Pier F	Fair-good	yes	20-30	Pier
Harborside	Fair-good	yes	40-60	Mfg. & storage terminal
Pier D	Fair	yes	15-20	Pier
Penna. Ferry Slips	Abandoned	no	0	Commercial, See below
Pier C	Very poor	no	0-5	Razed
Pier B	Abandoned	no	0	None
Colgate-Palmolive pier	Good	yes	10-20	Pier
Colgate-Palmolive pier	Abandoned	no	0	None
International Flavor Co. Pier	Very, very poor	no	0-2	Razed

We do not have one single recommendation for this area. In our view, Harborside should and will remain in its current capacity. They have only 50,000 square feet of vacant space at present (out of a total of approximately 2,000,000) and have purchased about 8 acres in the northwest area of the razed Pennsylvania Railroad Passenger Station. They plan to use this side for container facilities. The Harborside Terminal also has an option to buy more land in the vicinity and has acquired another warehouse property along State Highway Route No.1 (in industrial area No.8). Of more importance, perhaps, is the fact that Harborside is intending to widen its narrow apron out to the bulkhead (in between Piers D and F). This is approximately 150 feet and would be used for container facilities. Consideration is also being given to widening the aprons at these two piers and to renovating them. It appears that Harborside Terminal is flourishing and will continue to do so as the management diversifies into a containerized operation and continues to seek to attract small manufacturing establishments.

At Exchange Place and the Hudson River, we feel an opportunity exists to create a profitable commercial enterprise in the place of Pier C and the abandoned ferry slips. Located next to the P.A.T.H. Station and hence only minutes from downtown Manhattan, this area presents an unusual opportunity for an enterprising and bold entrepreneur. We are of the opinion that serious consideration should be given to the development of a tourist-recreation complex which would feature one or two restaurants and a series of specialty stores. We call your attention to the very successful Pier 73 complex known as "Philadelphia 1700" at the foot of Spring Garden Street and the Delaware River in Philadelphia and to the Ghirardelli Square operation in San Francisco as something to emulate in this regard.

The Colgate waterfront facilities (in reality one pier which is used to pipe in such liquids as tallow and oleum) will undoubtedly remain, and the pier at the end of Essex Street will be razed since it has already been condemned. The future of this area is dependent upon the future of the Colgate manufacturing operations. As of this writing we have not investigated this situation but we presume that the Colgate plants are stabilized in their present location.

5. Area V

This area consists of the area south of the Tidewater Basin and/or Big Basin which is known as the Morris Canal Basin. It is east of the New Jersey Turnpike and north of Johnston Avenue and is the locus of the Lehigh Valley Railroad yards, most of which have been abandoned to the City.

<u>Major Facility</u>	<u>Con- dition</u>	<u>Func- tioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Pier A	Demolished	no	0	None
Pier B	Fair-poor	yes	5-15	See Below
Pier C	Very, very poor	no	0-2	Razed
Pier D	Very, very poor	no	0-2	Razed
Pier E	Very, very poor	no	0-2	Razed
Pier 6	Very poor	no	0-4	Razed
Pier 4	Fair	yes	10-25	See below
Pier I	Very poor	no	0	Razed
Pier L	Fair-poor	yes (for Mooring only)	10-25	See below
Transfer Bridges				
#1E*	Demolished	no	0	None
1D	Demolished	no	0	None
1C	Demolished	no	0	None
1B	Demolished	no	0	None
1A	Good	yes	15-35	Float bridge
1	Demolished	no	0	None
Back-up yards	Fair	yes	20-30	See below

*Transfer bridges 1A through 1E have been replaced by six (6) chords whose future life is 15-35 years. They are in good condition.

This area was the site of the proposed Consolidated Lighterage Terminal which was suggested by the Tri-State Transportation Committee. The Liberty Park development proposal took cognizance of this Tri-State recommendation, but has now reverted to its original plan to extend north to the Basin, acquisition of the passenger yards of the Central Railroad of New Jersey. This recommendation, however, is now being restudied and, in our opinion, it is unlikely that it will reappear in its current form. The Liberty State Park Development plan portrays this area with a railroad yard with a number (3 or 4) finger piers. In the perspective drawing of this park, some high-rise housing is indicated for the area north and west of Morris Canal. Although used by the Lehigh Valley, particularly with respect to lighterage and car floats, most of this area is owned by the Jersey Central Railroad and hence its future use depends on both the final results of the merger negotiations, and the application of sound planning principles. With respect to the former, the ultimate role of the Lehigh Valley and the Central Railroad of New Jersey is undecided and uncertain. Our estimate is that both

these lines will merge into a bigger system, i.e., either the Chesapeake & Ohio - Baltimore and Ohio complex or the Norfolk and Western system, and when this occurs these particular years will become superfluous. Moreover, we feel that from a planning point of view, it would be practical not to have the Liberty Park development bisected by railroad yards as the current plan indicates and, therefore, for these reasons we suggest that the highest and best use for this area would be to integrate it into the Liberty State Park and adjacent high rise apartment complex. For example, if the residential market studies bear out that there is sufficient demand, we would think that a medium density residential use - high rise interspersed with clusters of town houses - would be an appropriate land use and should be considered for this area. It should also be borne in mind, however, that if and when the Central Railroad of New Jersey removes the coal dumper from Pier 18 to permit the Liberty State Park development to be completed they have mentioned that one suitable relocation site for the new coal dumper operation would be at the end of Johnston Avenue at the present passenger station. If this materialized, and we believe that a quid pro quo arrangement to a less valuable and more suitable site elsewhere on the Jersey City waterfront might be necessary, our foregoing recommendation for residential development would no longer be compelling.

6. Area VI

Area VI consists of the Caven Point Military Base and Greenville Yards of the Pennsylvania and the Claremont Terminal facilities of the Lehigh Valley Railroad. It extends south to the Bayonne city line, west to the Hudson County extension of the New Jersey Turnpike and is situated south of Caven Point itself.

<u>Major Facility</u>	<u>Condition</u>	<u>Functioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Long pier	Poor	yes (for mooring only)	40-60	Indeterminant No commercial use (see below)
Trestle	Abandoned	no	0	None
Lehigh Valley Warehouse and Quay	Fair-good	yes	10-20	Storage and quay
Steers Pier (North)	Fair	yes (for mooring only)	20-30	Razed
Steers Pier (South)	Very, very poor	yes (for mooring only)	0-2	Razed
1 Ice Breaker	Fair-good	yes (for westbound freight)	10-20	Pier

<u>Major Facility</u>	<u>Con- dition</u>	<u>Func- tioning</u>	<u>Years of Life Remaining</u>	<u>Future Use</u>
Bridge floats				
9½	Excellent	yes	20-30	Bridge floats
10	Excellent	yes	20-30	Bridge floats
11	Excellent	yes	20-30	Bridge floats
12	Excellent	yes	20-30	Bridge floats
13	Excellent	yes	20-30	Bridge floats
14	Excellent	yes	20-30	Bridge floats
Coal Dumper Pier	Very poor	no	0-2	Razed
Greenville Back-up yards (Penna. R.R.)	Good	yes	40-60	Railroad yard
Back-up Yards Lehigh Valley R.R.)	Good	yes	30-50	Railroad yard

We believe that the future merger of the Pennsylvania and New York Central railroad yards will mean and necessitate that the area south of the United States Military Base (known as the Caven Point Terminal) will be used exclusively for railroad yards and for goods distribution facilities. Indeed, the Pennsylvania Railroad is buying real estate from the City of New Jersey to be used for a containerization facility. This property is presently in tide lots and located east of Point Breeze and extends south some 200 feet from the southern boundary of the Pennsylvania yards. The Pennsylvania Railroad intends to fill about 100 feet of this area for a container pier.

There is every indication that the Greenville yards will remain one of the most important freight terminals for rail traffic in the Port of New York and continue to provide excellent access by rail to all parts of the country. The pending merger of the New York Central and Pennsylvania Railroad will only serve to increase the importance of this facility. Indeed, on one of our field trips to the site we observed railroad civil engineers surveying the southern part of the property in order to begin to expand and to enlarge it. This area is not blighted and its designation in the city's Master Plan as rail and port facility is the proper determination. Whether or not the owner, the Penn-Central Railroad, would ever want to use this property for any other form of industrial development is a moot point, but it is certain that such companies - if they are to develop here - would have to be large users of rail services before they were sold or leased any land in the Greenville site.

Our conclusion concerning the future of the Claremont area is identical to that of the Greenville Yards with the exception that (a) its owner - the Lehigh Valley Railroad - is apt to merge in the next few years with one of the larger railroad complexes, and (b) part of the easternmost portion of this area is used by a salvage and waterfront construction firm and by a scrap yard. These uses should be fostered here. Although these activities are certainly blightful, they are will protected from other property holders and even separated by a large body of water from the Caven Point area. Moreover, such activities have to take place somewhere in the region and although no city can take pride in the number of scrap yards it possesses, the fact remains that such establishments provide an important economic function in the region and that this location in the Claremont area is well suited to such types of industry. This is not to discount the possibility, however, that some of the scrap operations and the Steers facilities would be replaced in time by additional railroad oriented industries.

The Caven Point Military Base is not being used very actively by the United States Army at the present time. Nevertheless, the deactivation of this facility, if it is to ever happen, will be decided by high level authorities in Washington and possibly Trenton, and it would seem that whatever Jersey City might want or consider for the area must be deferred to these other public officials and considerations. Therefore, the notion of a highest and best use is not a very realistic one in this case as the area is being used by the Department of Defense and we were told that the Second Corps of the First Army, under whose aegis the base falls, has no plans to relinquish it. If the military ever decides to release this area or to return it to civilian use, consideration might be given to a commercial entertainment facility since access by automobile is very good and the area has an unparalleled view of the New York Harbor. That is to say, even though Freedom Land failed, this site might be appropriate for a successor activity of the same general nature. The sandy beach surrounding the site is a definite asset if the adjacent water ever becomes of sufficient quality (depolluted) to permit water sports, and we understand thought is being given to this problem. The nine-tenths of a mile trestle and pier extending into New York Bay has no commercial application. It was used to loan ammunition during World War II, and affords a magnificent view of the Harbor side and lower Manhattan. For this reason, it might also be related to an eventual commercial-recreational use such as a marina. Should these events not transpire, this area's future use as an industrial port development might seem to be appropriate

7. Area 7 - Point Breeze

This property lies across the southern boundary of Jersey City and consists of undeveloped natural waterfront extending approximately 1300 feet from the Greenville yards of the Pennsylvania Railroad to a 500-foot strip of property belonging to the City of Bayonne. An overpass connecting Breeze Point with Exit 14A of the New Jersey Turnpike will make this site rapidly accessible by road.

A dredging and reclamation project within the U.S. Bulkhead Line and the limits of Jersey City riparian rights could provide excellent access by sea from the deepwater channel in the Hudson River to a marginal-type ocean terminal backed up by over 125 acres of land. By extending this facility to the Pierhead Line, this area could be almost doubled.

The access by road, rail and potentially by sea indicates optimum utilization of the easternmost 100 acres of reclaimed area and existing land as an intermodal transfer point. Remaining land will be of greatest value to port-oriented industries which rely on waterborne import of raw materials and have export potential for their products after a deepwater port has been built.

Allocation of upland on Breeze Point to industrial use should carefully preserve a four-lane right-of-way for road access to any future port and also have space for connecting rail-spurs. The likely cost of building a six-berth ocean terminal in this area may for this purpose be estimated at \$20 million, which indicates a magnitude of investment suitable for a terminal operating company catering to several steamship lines. The size and location of a potential port at Point Breeze is eminently suitable for bulk cargo operations, a containership terminal, a combination of both, or a combination of containerized and conventional general cargo.

These are four possible reasons for Federal assistance in such a project:

1. Employment opportunity
2. Supplementary potential for shipment of MSTs cargoes near to Bayonne to relieve congestion.
3. Reciprocal use of the dredged approach channel in conjunction with the existing one north of Bayonne terminal
4. A first-class example of planned, integrated transportation and land utilization.

The recent announcement, however, that the City of New York intends to develop an area for containerization along the Staten Island waterfront, of course, both diminishes the likelihood of such Federal Aid and makes its need more imperative if Jersey City intends to maintain its competitive position with New York City.

There are few sites in the New York harbor area with as good access potential and hence with potential for development as a commercial port center featuring possible containerization and interchange between other transportation modes.

About 100 acres in Point Breeze is the most desirable size for a port complex and this amount of acreage should be reserved for this activity and receive highest priority. Any use such as an industrial park featuring trucking, light industry or distribution activities for domestic purposes should be subservient to the notion of a port development in this area. The Point Breeze area should capitalize on its ability to enhance the export-import trade.

We would look with favor upon the development of such a port and would think that it could tend to improve the competitive economic position of Jersey City, the New York port region, and the northeastern industrial complex as a whole.

III. A DETAILED ANALYSIS OF THE CONDITION OF NINE INDUSTRIAL DISTRICTS

A. Introduction

In this section we shall analyze, in turn, the characteristics of nine industrial districts in Jersey City, which were selected for us. First we will present in descriptive terms the background and salient characteristics of each of these areas; then we will discuss the scoring or rating of each area and next we will offer our suggestions and recommendations for action to ameliorate and to improve the conditions found therein.

The rating or scoring system is derived from an examination of 21 items. Each of the nine areas was evaluated with respect to these items and scored (1 to 5). These items in turn received different relative weightings (1 to 3). In every case, the higher the score the worse the rating, i.e. 1 (no problem) to 5 (very serious problems). The maximum average score an area could receive was 10.0 and the minimum was 2.0. Area 4 received, for example, the worst average score 3.9, and Area 8 the best score, 2.1. Table 9 lists the 21 items, and gives the weighting for each while Table 10 shows the scores for each of the areas. In general, as an examination of Table 10 indicates, only Areas 4 and 8 stand out, while all the other areas appear to cluster together, suggesting that there is relatively little difference between them. On this basis, Area 4 should receive treatment before the other areas, since it is relatively in poorer condition.

We now turn to a detailed examination of each area.

B. An Analysis of Each Area

1. Area 1

a. Background

Area 1 is located south of Fairmount Avenue; its eastern boundary is Woodward Avenue and its western edges are Randolph and Cornelison Avenues. The southern limit is terminated by the tracks of the Newark and New York railroad.¹

Area 1 has a large industrial complex adjacent to Lafayette Park which is currently being shared by approximately eight firms. It is not now fully occupied and it is likely that in the future tenants will become even more difficult to come by. Across Communipaw Avenue from this complex the area at the end of Berry Road is occupied by a junk yard. It would appear to be a less-than-ideal site for such a land use.

1 The location of this area and the other ones is shown on Figure 1 on page 59.

WATERFRONT AND INDUSTRIAL STUDY AREAS

LEGEND:
Waterfront Areas
I...VI
Industrial Areas
1....9

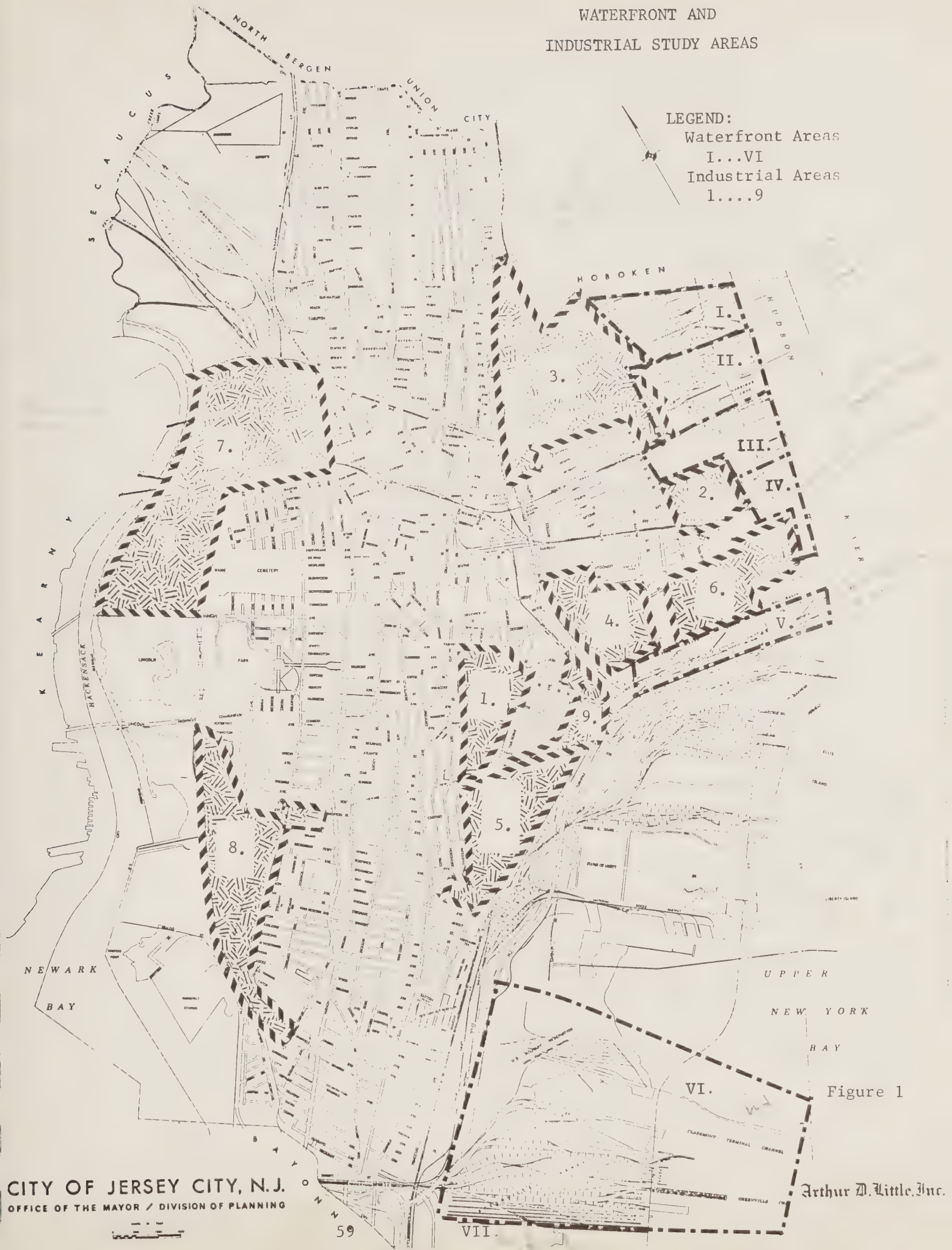


Figure 1

Arthur D. Little, Inc.

TABLE 9

Industrial Areas' Characteristics for Blight Analysis

<u>Characteristics</u>	<u>Relative Weighting</u>
1. Inaccessibility of area to regional transportation systems.	3
2. Traffic congestion and poor traffic circulation.	3
3. Presence of railroad beds in streets.	1
4. Obsolete size of blocks.	1
5. Inadequate or insufficient parking space.	3
6. Presence of marginal land uses amongst better land uses.	2
7. Presence of non-conforming land uses, e.g. industrial in a residential zone.	3
8. An absence of connected sewers and water mains.	3
9. Sidewalks not in existence.	2
10. Platted streets not put in place.	1
11. Lots narrow, undersized, odd-shaped, and poorly parceled.	1
12. Alleys too narrow, obstructed, and not lit properly.	1
13. A large amount of vacant land (probably held for speculation, or only used for temporary storage and parking).	2
14. An abundance of sheds and junk yards.	2
15. Excessive building heights and building density.	2
16. Buildings placed on poor topography, or built on steep slopes.	2
17. Built on marsh land or other inadequate soil.	1
18. Lack of land-scaping.	1
19. Age of buildings.	3
20. Abandoned buildings.	3
21. Area fragmented by railroads and turnpikes.	2

Source: Arthur D. Little, Inc.

TABLE 10

Ratings of Industrial Areas

Area	1	2	3	4	5	6	7	8	9	
3	3	3	1	5	2	5	1	1	5	1. Transportation inaccessibility
4	4	3	3	5	2	3	4	4	4	2. Traffic congestion
1	1	2	2	1	1	3	2	1	1	3. Railroads in streets
1	1	2	1	1	1	1	1	1	1	4. Obsolete block sizes
3	3	4	4	5	3	4	3	2	2	5. Inadequate parking
4	4	2	5	5	2	4	4	2	2	6. Marginal land uses
5	5	2	5	5	3	4	4	4	5	7. Non-conforming land uses
1	1	1	1	3	2	1	2	1	1	8. Absence of sewers
2	2	3	2	3	5	2	3	1	2	9. No sidewalks
2	2	1	3	3	4	1	2	1	1	10. Platted streets
4	4	2	2	4	3	3	2	3	2	11. Poor-sized lots
1	1	1	1	1	1	1	1	1	1	12. Obsolete alleys
2	2	1	4	5	5	1	4	2	4	13. Vacant land
4	4	2	3	5	5	3	3	2	3	14. Sheds and junk yards
4	4	5	3	2	2	3	2	2	1	15. Building density
1	1	1	1	1	1	1	1	1	1	16. Poor topography
1	1	1	1	2	2	1	2	1	2	17. Poor soil
5	5	5	5	5	5	5	5	4	5	18. No land-scaping
5	5	5	5	5	4	4	3	3	4	19. Age of building
5	5	2	4	5	5	3	2	2	3	20. Abandoned buildings
3	3	1	5	3	5	1	5	2	5	21. Fragmented buildings
3.2	2.5	3.1	3.9	3.2	2.7	2.8	2.1	2.9		Average

Scores range from 1 (no problem) to 5 (serious problems)

Source: Arthur D. Little, Inc.

b. Rating

Area 1 had an average score of 3.2, which meant that it tied for the second "worst" of the nine districts surveyed. It ranked particularly low in abandoned buildings, non-conforming land uses, lack of land-scaping, abandoned buildings and age of buildings.

c. Suggestions for Action

An urban renewal project is currently under way covering much of the territory between Areas 1 and 4. Obviously, it is hoped that the effect of this project can be carried into these areas and city actions with respect to them should be oriented around this hope. It is clear that without city help private enterprise will not choose to make any new investment in either Area 1 or Area 4. Therefore, the future of Area 1 (as well as Area 4, for that matter) is related to the redevelopment which is taking place between Area 1 and Area 4. If major industries leave this area, then it should be considered for gradual change to residential use.

As we indicate for Area 3, the junk yards in the north east section of Area 1 should be cleaned up by enforcing city ordinances, and especially fencing-in the property. In brief, however, there is very little that can be done with this area which is not related to a total urban renewal treatment for this part of Jersey City.

2. Area 2

a. Background

Area 2 is compactly located between Henderson and Greene Streets and between Pearl and Second Streets. This area is the most homogeneous of the areas studied. Four blocks square, a total of sixteen blocks, it is constituted almost entirely of high loft buildings, most covering a whole block. Ranging from three to ten stories tall, they provide a larger supply of loft warehouse space than is currently needed. With lessening need for this type of space, the future of this district is not bright. On the other hand, the buildings appear to be in reasonably solid shape at the present, and together constitute a large investment. Furthermore, it is well delineated from residential and commercial neighborhoods and requires only better access for transportation to be an ideal spot for such activities to the extent that they do exist. The internal transportation system is mediocre and the access to the highway network is poor.

b. Rating

Area 2 received an overall rating of 2.5. Of the nine areas studied, this was the second-best score. This area received the lowest rating of all the areas in terms of building density. As Table 10 indicates, it scored highest in seven of the 21 characteristics, but lack of land-scaping and age of buildings helped to increase its score.

c. Suggestions for Action

We feel it would be better to preserve this area for loft warehouse activities, than any of the other areas studied, although in the long run it may have a potential for residential use. Not only is this a good location for loft-type activities (and to a certain extent they are expanding; viz. the new Maneschewitz wine warehouse), but also Area 2 is more dependent upon lofts than is any of the other areas. If the lofts were to be demolished, this area's demise would speedily be incurred.

Better off-street parking is definitely needed and the city should investigate the feasibility of furnishing some. Better internal transportation within the area should be encouraged. It is conceivable that some of the streets in the area could be widened. In some cases spot rehabilitation might be needed and assistance to private manufacturers to help to upgrade their facilities could be given. Manhattan manufacturers should be encouraged to locate in this area since it is relatively accessible and since the cost of space is relatively inexpensive. Because of the area's attributes, investigation into any way in which the city can aid in the maintenance of this district is undoubtedly worthwhile

3. Area 3

a. Background

Area 3 is located in the northeast portion of Jersey City. It is generally situated north of Ninth Street and south of the Hoboken city limits. The eastern edge is Provost Street and the western boundary is in effect the Palisades and the New Jersey junction railroad.

Area 3 is quite large, ranging from 9th Street on the south, to Hoboken and from the Palisades to the waterfront. One highway, (Routes 1 and 9) is the only major transportation link from the area and the traffic is often heavy near this highway. The circulation is further hampered by the fact that all of the railroads reaching the Jersey City waterfront from the northwest must cross through the area. There are a number of newer plants, for example the Pepsi Cola distribution warehouse. The main strength of the area is in a few big concerns, such as Emerson, National Cold Storage and Lackawanna Warehouse.

Other than these relatively large firms, the shift to more marginal uses can be observed. Loft buildings are particularly susceptible and several have been divided for leasing and some are vacant, particularly in older buildings in the southern edge of the area, or in the northwest corner tucked against the Palisades. Because of the distance to Routes 1 and 9, and the broken street patterns, transportation factors for the latter group are not favorable. Another indication of the lack of pressure for relatively high economic uses of the area, is the presence of junk yards.

It should be noted that allowing junk yards need not necessarily remove all aesthetic standards for the neighborhood. Fences sufficiently high to hide all junk can be required and there is undoubtedly a city ordinance which should be enforced against the storage of junk on the streets outside the fence. Moreover, we also observed junk that was sitting on trucks that may have been parked there for years.

The big buildings in the area are maintained well and still in solid shape. The extremely large number of people employed in these concerns makes it imperative that the city strive to cooperate with their needs and goals. Various comments made by officers of these companies during the inspections suggest that they do not perceive this to be the posture of the city at present.

Quite a few residences are included in industrial Area 3. Along the southern edge in what is probably the oldest portion of the area, the industrial and residential neighborhoods meet on a somewhat irregular line. Just north of the highway, where it emerges from the Holland Tunnel, the majority of about six blocks are primarily devoted to residential use. Included in this neighborhood is a sizeable public housing project. With industry to the east, west and north and the highways, plus the urban renewal project to the south, this neighborhood finds itself completely isolated from other residences and from many of the facilities needed for its regular functioning.

b. Rating

Area 3 received an overall average rating of 3.1. It scored very poorly on such characteristics as marginal land uses, non-conforming land uses, age of buildings, fragmented by railroads and lack of landscaping. Of these nine areas studied, Area 3 had the fourth highest or worst score.

c. Suggestions for Action

The public housing in the area desperately needs amenities in the form of open space and breathing space. For this project to be improved, adjacent industrial uses should be cut back where possible and open space expanded. Widening the city streets would improve the traffic

congestion. We suggest enforcing the city ordinances dealing with parked trucks loaded with junk on the city streets for inordinant lengths of time. We also suggest prohibiting junk yards from proliferating and keeping those that do exist finced in and out of sight. A major problem exists in the 15th Street forced main sewer which will ultimately require replacement all the way to the river at tremendous expense.

4. Area 4

a. Background

Area 4 is located south of Montgomery Street and north of Mill Creek (The Tide Water Basin). It also lies between the New Jersey turnpike extension on the west and Jersey Avenue on the east. It is bisected by Grand Avenue.

Area 4 has both industrial and residential land uses. The neighborhood has more than its share of residential and industrial problems. It is obvious, however, that the residential blight is only very marginally due to the presence of industry. This area has a considerable number of abandoned industrial and residential buildings. There has been almost no investment in the area for many years.

It should be noted that the portion of Area 4, which is located south of the railroad tracks and which divides the area is markedly different in use from the rest of these two areas. With limited access, only Jersey Avenue enters the area; it is the site of several marginal industrial use enterprises. Streets, gutters, curbs, sewers, etc. have not been installed and traffic is undoubtedly extremely messy in the winter. However, because of the site's isolation, the area has undoubtedly little effect on any other part of the city and it is probably a satisfactory location at present for the scrap yards and similar types of land which are found here.

Grand Avenue is a multifunctional street, since it carries both local and through traffic. The Edgewater railroad acts as a barrier in this area and appears to be used very infrequently. North of Grand Avenue, the portion of the area is mixed, residential and industrial in character. It is distinguished by an abundance of truck repair and garage establishments. There is a plethora of abandoned stores and vacant housing and unbuilt small lots.

b. Rating

Area 4's average score was 3.9, the "worst" or "highest" score of any area surveyed. It received the "worst" rating of any of the areas with respect to traffic congestion, inadequate parking; and tied with one other area with reference to vacant land and presence of sheds and junk yards. Because of the score, which reflects these poor conditions, this area would appear to be ripe for remedial treatment and should receive a relatively high priority.

c. Suggestions for Action

Consideration should be given to abandoning the Edgewater railroad because it is used sparingly and because its effect on the area is desultory. The area north of Grand Avenue is too large to be dealt with on a piece-meal basis. It would be better to renew it rather than to rehabilitate it. Since the blight is caused in large measure by the residences, cleaning up or improving the industrial parts of the area would not suffice in making the area a decent one in which to live or work. Therefore this area requires residential rather than industrial renewal.

5. Area 5

a. Background

Area 5 encompasses the Lafayette industrial area. It is situated west of the New Jersey Turnpike at Interchange 14B and generally east of Garfield Avenue, north of Bayview Avenue and south of the Newark and New York railroad line. A stub of this area extends westward from Garfield Avenue to Arlington Avenue, between Wilkinson and Bayview Avenues.

Some city action has already been undertaken in this area, and a study by the Division of Planning was prepared several years ago. A large amount of land has been cleared and is now vacant. In fact, approximately one-third of the land area in Area 5 is now vacant. An equally large percentage is devoted to junk yards or used only as a dump. The effect of these uses on the land intended to be utilized as industrial park is hardly positive. Liberty Industrial Park, across the Jersey Turnpike extension, offers a contrast in image that could be at least partially achieved in this area with better control of these lower uses. The majority of the remaining portion of Area 5 is used for industrial plants. The largest of these is used by the elevator division of Westinghouse. This plant is large and solid and in its few feet between the sidewalk and the building, contains the only touch of landscaping we observed in the districts we studied (aside from Holland Tunnel) in industrial Jersey City. Most of the buildings in Area 5 are older and there appears to be little economic demand for them. One indication of this is the fact that Clorox has yet to find a tenant for its old plant.

Although sewers have been connected (some open ditch sewers remain), there are no curbs and gutters in this area. On Caven Point Road, adjacent to the tracks and to the dump, there is a large building, the majority of which was devoted to a United Mills discount store, which went out of business in the summer of 1966. It is a new building and one might speculate on why a commercial use was permitted to be opened in this location.

b. Rating

Area 5 tied with Area 1 to have the second highest or "poorest score" (3.2) of the nine areas surveyed. It was the worst area with respect to a lack of sidewalks and was also distinguished by its poor score concerning marginal land uses, abundance of vacant land, sheds and junk yards, abandoned buildings and lack of land-scaping and fragmentation by railroads.

c. Suggestions for Action

At the intersection of Pacific and Caven Point Avenue, a large dilapidated building is standing. It would appear to be of benefit to the city to have it torn down, rather than to leave it remaining. We would also suggest fencing around the junk yards if relocation is not feasible. More open space and particularly off-street parking is needed in the southwest corner of this area, on top of the hillside at Marcus Street. This site might also be appropriate for spot clearance as some of the existing factory buildings are quite old.

The greatest opportunity, however, for this area lies in developing the vacant land as an industrial park. The new establishments which might be attracted should be drawn from a list of industries which have a New York orientation. Among these are included: laundries, bottling plants, breweries, publishing and printing, building supply warehouses and other material storage activities, and bakeries. The vacant area between Pacific and Halladay, would appear to be ripe for development. The city should strive to publicize its comparative advantages, i.e. propinquity to Manhattan, and a large amount of relatively inexpensive land, if it wants to merchandise and to promote the Lafayette Industrial area.

6. Area 6

a. Background

Area 6 is situated south of York Avenue, north of the Tidewater and Big Basin and east of Grove Street. It extends as far east as the Bulkhead Line.

This area has a marked variation from east to west. The eastern portion of the area is dominated by the Colgate Palmolive Company. Covering many blocks, the total plant is an exhibit of the policy of utilizing earlier investment to the fullest extent through preventative maintenance and additional new investment when it is required for modernization or expansion. The buildings date from at least as early as the mid-19th century, up to some recently constructed. Because of the economic importance of this concern to the city, any cooperation that the city can offer, we feel, is likely to be a worthwhile investment.

The western portion of the district, with only a couple of exceptions such as United States Gypsum, is in direct contrast to the area occupied by Colgate Palmolive. Although the buildings date from approximately the same era, there has been very little recent construction. The inadequate maintenance of existing facilities may be observed here, and there are vacant buildings, some of which are in this part of the area.

The area is not dilapidated, but the signs of deterioration are obvious. The location is extremely poor from the point of view of transportation, and rebuilding the area for heavy industrial use would appear to be doomed to failure. The two portions of Area 6 are almost separated by the residential neighborhood south of city hall.

b. Rating

Area 6 scored an average rating of 2.7, which placed it with the third "best" score of the nine areas surveyed. It scored particularly low, however, on items of transportation inaccessibility, and lack of land-scaping.

c. Suggestions for Action

This area's relatively good score suggests that immediate remedial treatment for this area is not as urgent here as it might be elsewhere in the city. Nevertheless, we note that the effect of the industrial on the residential and vice versa, is obviously not positive. Perhaps, the best future would be an extension of the residential neighborhood into the decaying portions of Area 6. One possibility that might be investigated would be a more intensive development of the marina bordering the area. To be more specific, we feel that an opportunity exists in this area for a marina development in Little Basin and that residential expansion should occur in the center of the area and move toward the southwest. The vacant buildings in this portion of the area might be upgraded.

Better transportation facilities for both industrial workers and residences should be provided. City officials should make a greater effort to get to know better Colgate executives and their problems. Finally, the obsolete city-owned Burns Brothers Coal Dump should be razed.

7. Area 7

a. Background

Area 7 is located between the Hackensack River and Tonnelle Avenue. It extends north as far as Utica Avenue and south to Duncan Avenue. Located within this area is Tonnelle Circle, the General

Pulaski Skyway and parts of St. Peters and Holy Name Cemeteries. The area is very large and shows a marked difference in characteristics in its various portions. In the south, across from the vacant Holy Name Cemetery property, a half dozen terminals have been constructed. These are relatively recent in origin and seem well placed. There is an additional development of this nature immediately north of this site, although some other plants and yards are mixed in here. The western portion of the cemetery is vacant and being used in part as a dump. It is interesting to note that a new occupant has chosen to rehabilitate a large manufacturing plant at the west end of Broadway. In the northwest corner of the area, north of the General Pulaski Skyway and Routes 1 and 9, six large blocks are devoted to utility installations. The remainder of the property in this area, north of the Delaware Lackawana and Western Railroad, is again truck depots similar to those in the southern portion.

In the northeastern portion, however, the character is quite different. Rather than spacious, it is extremely intensely developed and infuriatingly criss-crossed with railroads and highways. There are residential blocks mixed in with the industrial, as well as many small plants: American Can and Western Electric are the most prominent industries located in this area.

Many of the gas stations are marginal, but the major concern of the area is the poor street arrangements and highway pattern. It is very difficult for example to cross Newark Avenue in a number of places and Tonnelle Circle presents a well-recognized problem.

b. Rating

Area 7 average score was 2.8. Hence it was the fourth "best" of the nine areas surveyed. It only rated poorly on the lack of land-scaping and fragmentation by railroads.

c. Suggestions for Action

It is somewhat difficult to see what the city can do at this late date to change this pattern of mixed-land uses and poor platting. It can, of course, only offer suggestions to a concern such as American Can Company. But even if it were able to identify an area needing treatment and lacking major interests which would have to be shuffled, it would be questionable whether any positive effect would radiate from such a project across the many boundaries presented in the district. Certainly this area is of primary concern to the transportation consultants. The key to its economic future is primarily in the realm of trucking and thus facilitating the transportation effectiveness of the area is probably the greatest contribution the city has to offer. That is to say the future of this area depends more upon the transportation and highway improvements than on industrial renewal and related improvements. There is tremendous congestion and confusion in the street

planning. In terms of trucking, the area is important for the region and the area is important for the Jersey City economy. The trucking depots should be left alone, since this area is a good location for them.

It is probably best not to interfere with the utility plants, although this is hardly an ideal location for them. Since the older plants on the hills, such as the American Can Company's do not mix well with residences, it would be desirable to replace some of the older housing with additional needed parking areas.

8. Area 8

a. Background

Area 8 runs south from the Lincoln Highway (Communipaw Avenue) to Lembeck Avenue at the western edge of Jersey City. Bordering the area on the west is New Jersey State Highway 440, and West Side Avenue on the east.

The most substantial investments in Area 8 are the large plants located in the southern half of the area. Among these are Inland Steel, Ryerson Steel (a subsidiary of Inland Steel), Mallinckrodt, and Metro Glass. Although these plants are substantial, the area is not intensively used. For example, Ryerson leases one of its main buildings, as well as a two-acre piece of its land. In the center of the area there has long been older industrial development along the Newark and New York railroad tracks cutting the area in half. The buildings used by many of these smaller operations are in poor condition. Furthermore, many residential streets are set in the middle of this area, complicating the problem. The northern part of the area has only small warehouses and plants. These are generally quite a bit newer than the development along the railroad. Contiguous to them a fair amount of new housing has been built indicating the apparent shortage of land for housing in the city that results in new residential development right next to industrial areas.

For transportation purposes, the area is well located, since it is adjacent to State Route 440. However, accessibility is restricted by the limited number of streets emptying into the route. This results in somewhat heavy traffic on Westend Avenue.

Also involved in any consideration of the area, is the development going on across Route 440. An enormous grocery-automobile-department store complex has been built by Two Guys from Harrison. Shoprite and Robert Hall also have new stores in this area.

b. Rating

Area 8 scored the lowest of the nine areas. That is to say, it appeared to be in the best environmental condition. It did not rank inordinantly low on any one factor, suggesting that little, if any, city action is required here for some time to come.

c. Suggestions for Action

As noted above, in general the economic forces are sufficient to maintain and improve the area and there seems to be little justification for any heavy action by the city. Perhaps, however, some less-than-major efforts could make a marked improvement in the situation along the railroad, since it is a detriment both to the industrial park potential of the area and to the substantial investment in the surrounding residential neighborhoods. In general, however, this is an opportunity area for industrial growth, since the area will remain in industrial use and since it has excellent transportation connections and facilities. Private investment in the area will come in time, and it should be encouraged.

There is very little that the city could do, since this area is not a renewal area; private, rather than public renewal is sufficient for the area with the exception of the little piece or tail along the railroad line in the eastern-most part of the area. As noted above, this part of the area could stand some public assistance. For example, this area which extends towards Hudson Boulevard contains a number of older New England-type factory buildings. It is desirable that there is some new housing on the border of the area, because this forces an intelligent handling of the relationship between the industrial and residential area. Finally, the city could also improve the appearance of the area within the available open space and could communicate and advise prospective tenants and developers about available space in this area.

9. Area 9

a. Background

This area is situated in a crescent-shaped fashion along the eastern portion of the Newark and New York railroad (just west of the New Jersey Turnpike extension) and it huddles to the west of the turnpike extension as far north as Ash Street. It extends as far west as Whiton Street, but primarily encompasses the area bounded by Johnston, Communipaw, and Mortor Avenues, as well as the Turnpike. Hence, it is really a strip rather than an industrial area. It is blocked on one side by tracks and squeezed by a residential district on the other. There are no new buildings in the area and quite a few are at the end of their economic life. Arvey Corporation, by far the most

substantial concern in the area, is considering moving. Transportation difficulties appear to be a large portion of their concern. Should they decide to do so, the future of this area is very bleak. It is extremely doubtful that any large concern could be found who would take over the Arvey premises in toto. A firm with such resources usually prefers to build for its own specifications. With an already existing over-supply of such low-cost space, it is doubtful that the building would be of much value. The other industrial buildings in the area which are mostly located to the north, are in extremely poor condition.

b. Rating

This area received an average score of 2.9, which was the median rating of the nine areas. It ranked particularly low on the following factors: transportation inaccessibility, non-conforming land uses, fragmented by railroads and lack of land-scaping.

c. Suggestions for Action

The future of this area depends on what happens to the Arvey Corporation. If this company leaves, the area would be suitable for renewal, providing, of course, that the redevelopment agency were able to find a tenant who needed that large a site. Therefore, the city should be considering other possible uses for this area at this time so they will be prepared for whatever may develop here.

C. CONCLUSIONS AND SUMMARY

1. Industrial District 1

The respondents to our survey who had plants in this area unanimously agreed that street traffic congestion increased their plant operating costs and that their present buildings were obsolete. This is typical of this area which is one of the most "run-down at the heels" areas in Jersey City. The Jersey City Printing Company, which is located here has given some strong indication that they will want to vacate their premises. They should be encouraged to do so, but not at the risk of leaving Jersey City. That is, they should be offered land elsewhere in the city, perhaps in the Lafayette Industrial Park or near the present Liberty Industrial Park. If this were to occur, the center of this area "could be opened up". Thus The Jersey City Printing Company appears to hold the key to this area's future. This future, however, should not be an industrial one, but rather residential. There is very little reason for industry to locate here and as we have noted before, "There is very little that can be done with this area which is not related to a total urban renewal treatment for this part of Jersey City". Thus, rehabilitation will not suffice for this area and complete residential renewal is required in the long run.

2. Industrial District 2

Industrial District 2 is an older area, and the site of a number of loft buildings. Better off-street parking is desperately required as the streets are frequently congested. This is an appropriate area for spot rehabilitation. It is also a very suitable location for apparel manufacturers, and for other rather intensive users of space such as electronics firms, paper goods establishments and transportation equipment and parts suppliers. The street patterns in this area require examination; consideration should be given to widening some of the streets and reducing the width of the pavements. Because of its proximity to New York, firms with linkages to Manhattan should be encouraged to relocate in this area.

3. Industrial District 3

The anchor in this area is several large warehouses and the Emerson Radio and Phonograph Company. This latter firm intends to nearly double its employment and space within the next five years. At the moment there is considerable question whether or not this can be done in this area but there is no question that such an expansion cannot take place without the city's help. If Emerson were to double their size as they plan to, they would become the city's largest employer. Therefore, it behooves the city to work with Emerson so that they will not leave the city (and there has been some speculation that such an exodus might occur). It is no secret that Emerson's present buildings are obsolete. Most of them were constructed more than fifty years ago and

Emerson is a prime example of a firm which should be retained. It pays high wages and, as Table 13 indicates, electrical machinery manufacturers such as Emerson are slated to increase their employment by 30 percent in the next decade. Our personal interview with this firm elicited the fact that they felt the surrounding neighborhood should be torn down and that the city should "finish the job they started". "Abandoned cars should be cleared up" and the "blighted area" should be "torn down". They also felt that the bus service was "not totally sufficient" since "there were no connections between points".

Although we do not want to appear to be a representative for this firm or to take on a role which the Chamber of Commerce is better equipped to do, we think it significant that the city is running a very real danger of losing its potentially largest employer and to date is doing very little to retain them. Specific steps which the city might take to work more closely with this firm include: frequent meetings with them, furnishing them with the services they need, and examining the possibilities of different means of acquiring adjacent property for their use. We believe that if Emerson decides to vacate their existing premises, they will move completely from Jersey City.

The Master Plan calls for this area to be one for light industry. The presence of the public housing units near the Emerson facilities are questionable indeed. It would seem that they are not destined to be expanded. Consideration might be given to relocating the residents and using the land for Emerson or some other expanding industrial opportunity.

Four of the seven respondents to our survey which were situated in this area cited the need for better snow removal services. In general, we feel that this area was correctly designated as one for light industry in the Master Plan, but before it takes its rightful place it requires a considerable cosmetic treatment. Junk yards in the area, for example, should be fenced and streets widened. If the city puts capital funds into improving the area, the private sector will follow by allocating their own funds for expansion, for rehabilitating their own property and for building new facilities. Indeed, the city's two newest plants, the Pepsi Cola bottling works and the Bali Building, are situated in Area 3 and they suggest what could happen to this area if the city puts in the requisite public improvements.

4. Industrial District 4

As we have noted above, Area 4 has a split personality. The area to the south of Grand Avenue is suitable for extensive industrial land users such as building supply manufacturers or furniture and fixture companies, while the area to the north has a residential orientation. One of the survey respondents who was located in this area suggested "clearing the old tenements". He did not state whether they should be cleared for industrial or residential purposes. We feel that the latter is more desirable for the portion of the area which is north of Grand Avenue, and, indeed, the Master Plan so indicates this ultimate land

use. This area, however, requires extensive renewal rather than rehabilitation.

The presence of the transportation facilities south of Grand Avenue - e.g. the water access and the two railroad lines - portend that this area could be developed more extensively for industrial firms which require this type of transportation. This area is not aesthetically attractive but scrap yards, construction firms and others which require rail and water access do not mind this fact. Moreover, there are natural buffers in the form of the New Jersey Turnpike, the Morris Tidewater Basin and Grand Avenue which shield this portion of Area 4 from the rest of Jersey City and therefore this area should not have a deleterious effect on the adjacent neighborhoods if it is used for heavy industrial purposes. In summary, residential renewal is recommended north of Grand Avenue while allowing the market to operate freely as suggested for south of Grand Avenue in Area 4.

5. Industrial District 5

The greatest opportunity for this area lies in developing the now fallow land into an Industrial Park. Before this can be realized, however, sewer and drainage facilities will have to be provided as well as better public transportation. This location would be suitable for a number of expanding industries which require nearness to the market as a basic locational determinant. Among these types of industries which are expected to expand in Jersey City are bakeries, bottling plants, breweries, publishing and printing establishments, and building supply manufacturers and other material storage distributors.

There is very little that is required in the form of industrial renewal for this area with the possible exception of razing an old building at Caven Point and Pacific Avenues and supplying badly needed off-street parking facilities on the top of the hillside at Marcus Street. This latter site might also be appropriate for spot rehabilitation as the existing factory buildings are quite old.

6. Industrial District 6

The mainstay of this area is the Colgate-Palmolive Company which is currently Jersey City's largest employer. They suggested "a re-routing of bus lines, and the removal of tenement housing" as appropriate steps in upgrading their environment. The Onyx Chemical Company, which is also situated in this area, made the same observation. We believe, however, that residences should be allowed to expand into the decaying portions of the western and southern parts of the Area. Residential renewal would be appropriate in this instance. The major industrial firms will continue to spend their own funds in the upgrading of their facilities, and therefore industrial renewal is not warranted in Industrial District 6.

7. Industrial District 7

As we have mentioned above, "The key to the economic future of (this area) is primarily in the realm of trucking; thus, facilitating the transportation effectiveness of the area is probably the greatest contribution the city has to offer. That is to say, the future of this area depends more upon the transportation and highway improvements than on industrial renewal". This statement is reinforced by the fact that six of the seven respondents to our survey which are located in this area mentioned that local street traffic congestion increased their plant operating costs. This concern about streets was reiterated in their comments. One firm said, "pave Howell Street from Routes 1 and 9 to the Pennsylvania Railroad right-of-way", while another firm stated that there was a great deal of time lost because the railroad used the street crossing at St. Paul's Avenue as a switching yard, causing delays for traffic and "the condition of the tracks at this crossing is very bumpy for trucks and cars". A third mentioned, "better access from Tonnelle Avenue is needed, i.e. a traffic light at the plant entrance". And, finally, the Area's largest employer, The American Can Company, repeatedly stated in its questionnaire that street traffic congestion and the absence of parking was particularly bothersome to them. Although such comments are not particularly germane to the larger problems of urban renewal and community renewal programming, they are symptomatic of the fact that many of the difficulties in this area could be handled by the Traffic and Public Works Departments rather than by the Redevelopment Authority. On the other hand, we also believe that the residential area near the American Can Company and Western Electric plants should eventually be cleared so that parking facilities might be built and the street congestion alleviated. Such a clearance project would properly be handled by the Division of Planning and the Redevelopment Authority as an urban renewal development.

8. Industrial District 8

Industrial District 8 is not a renewal area with the exception of a small portion in the easternmost part which could be rehabilitated. This industrial area will be the locus for a considerable industrial expansion in the next decade by the private market. There is adequate vacant land for a large amount of new building and the industry which should be attracted here has been identified above. This is one of the few areas in the city where our survey did not elicit comments about the street congestion although the desire for better public transportation was raised by a number of firms in this area.

9. Industrial District 9

As noted above, "the future of this area depends on what happens to the Arvey Corporation. If the company leaves, the area would be suitable for renewal, providing, of course, that the redevelopment agency were able to find a tenant who needed that large a site". The Master

Plan, however, calls for the redevelopment of this area into one of residence. If there is sufficient market pressure for such a land use in this area, it would appear that the possible departure of the Arvey Corporation might be a fortuitous occurrence. If such actually transpires, the city should take steps to acquire the property through the conventional urban renewal channels and begin the process whereby this area might be transformed into a residential one. We can see little reason for industries wanting to locate in this area; indeed, one of the reasons given by Arvey for leaving is the poor transportation facilities extant in the area and these presumably would be enhanced if the area were to be redeveloped for residential purposes. It should also be noted that we have emphasized the public redevelopment actions in this area because we doubt that such a transformation would occur solely by the private market.

IV. A DETAILED ANALYSIS OF THE CONDITION OF BUILDINGS IN EACH AREA

A. INTRODUCTION

In this section we shall discuss the condition characteristics of the buildings in each of the nine areas surveyed. The method that was used to arrive at our evaluation may be found in the Appendix. We shall conclude with a section which summarizes our findings and conclusions.

B. THE BUILDING CONDITION SURVEY

In each of the nine areas surveyed a number of buildings were surveyed. In toto 256 buildings were analyzed and Table 11 below presents such a breakdown of their location. The nine areas were described in the preceding section.

TABLE 11

NUMBER OF BUILDINGS SURVEYED BY AREA

<u>AREA</u>	<u>NUMBER OF BUILDINGS</u>
1	21
2	18
3	41
4	11
5	18
6	26
7	33
8	50
9	9
Others	29
	<hr/>
TOTAL	256

Source: Arthur D. Little, Inc.

The total employment covered by this survey was 28,061 persons. The total land area was 21,107,000 square feet, and the total building floor area was 24,566,000 square feet. Table 12 presents a breakdown of these factors by area.

TABLE 12

EMPLOYMENT, LAND AREA AND BUILDING AREA
COVERED BY SURVEY

<u>AREA</u>	<u>EMPLOYMENT</u>	<u>LAND AREA</u>	<u>BUILDING FLOOR AREA</u>
1	2031	1,765,000	1,517,000
2	1309	984,000	2,916,000
3	7401	3,578,000	4,595,000
4	748	1,905,000	648,000
5	1985	1,725,000	1,880,000
6	3420	2,267,000	2,168,000
7	4611	5,754,000	3,092,000
8	2963	4,160,000	2,218,000
9	902	891,000	674,000
Other	2691	1,537,000	1,399,000
TOTAL	28,061	24,566,000	21,107,000

Source: Arthur D. Little, Inc. Field Survey.

The data in Table 12 pertains to more than the 256 buildings which were surveyed in depth, since additional buildings and areas were cursorily covered (see an explanation in the methodology section below). The total employment for the 256 buildings which were inspected was 26,492; the total land area was 16,369,000 square feet and the total building area was 19,050,000 square feet. These totals are distributed by area as shown in Table 13 below.

A total condition score was obtained for each building surveyed.¹ These scores were arranged into deciles. Thus each

1 The manner in which this score was obtained is explained in the next section which is concerned with methods.

TABLE 13
EMPLOYMENT, LAND AREA AND BUILDING AREA
OF 250 BUILDINGS INSPECTED

<u>AREA</u>	<u>EMPLOYMENT</u>	<u>LAND AREA</u>	<u>BUILDING FLOOR AREA</u>
1	1,942	1,232,000	1,303,000
2	1,286	696,000	2,668,000
3	7,253	2,227,000	4,259,000
4	577	547,000	328,000
5	1,925	1,211,000	1,735,000
6	3,271	1,343,000	1,941,000
7	4,255	3,840,000	2,880,000
8	2,448	3,051,000	1,919,000
9	844	685,000	610,000
Other	2,691	1,537,000	1,399,000
	<hr/> 26,492	<hr/> 16,369,000	<hr/> 19,050,000

Source: Arthur D. Little, Inc.

building was "placed" into one of ten categories. The higher the average score, the relatively poorer the rating of the building.

The score is based on the weighted results of each building's rating in terms of the factors pertaining to that structure which were measured in the survey. A condition-10 structure would, therefore, have a large number of high scores associated with it. A building would be so classified if, for example, it is very old; the condition of the outside walls, foundation, and roof is poor; the condition of the first floor is poor; it has no off-street truck leading spaces, etc. That is to say, a large number of ratings in columns 8,9,x and y of the survey form would generally produce a condition-10. As a rough approximation, we might consider buildings and blocks in conditions-9 and 10 as "blighted."

A condition-1 structure, on the other hand, would have a low score; it would have reasonable lot coverage and adequate set back (i.e., low land utilization); the appearance of the adjacent structure would be good; it would have a large number of auto parking spaces and off-street truck loading spaces; good access to the street; a large amount of natural light; more than adequate water, gas and sewer; good access to elevators; its walls would be in good condition, and so forth. Thus a large number of ratings in columns 0 and 1 would produce a condition-1. The 10 condition classifications were merged into five classes and mapped. These maps were turned over to the city. In order that the reader might visualize what is meant by the types of building in each of the five categories we have reproduced examples of them on the following pages.

Examples of Buildings in Condition Category 1



Grand and Hudson Streets



Sussex and Essex Streets



Sussex and Essex Streets

Examples of Buildings in Condition Category 2



Morris and Warren Streets



Dudley and Warren Streets



Dudley and Warren Streets

Examples of Buildings in Condition Category 3



Morris, between Hudson and Green Streets



York, between Hudson and Green Streets



Sussex, between Hudson and Green Streets

Examples of Buildings in Condition Category 4



Green, between York and Grand Streets

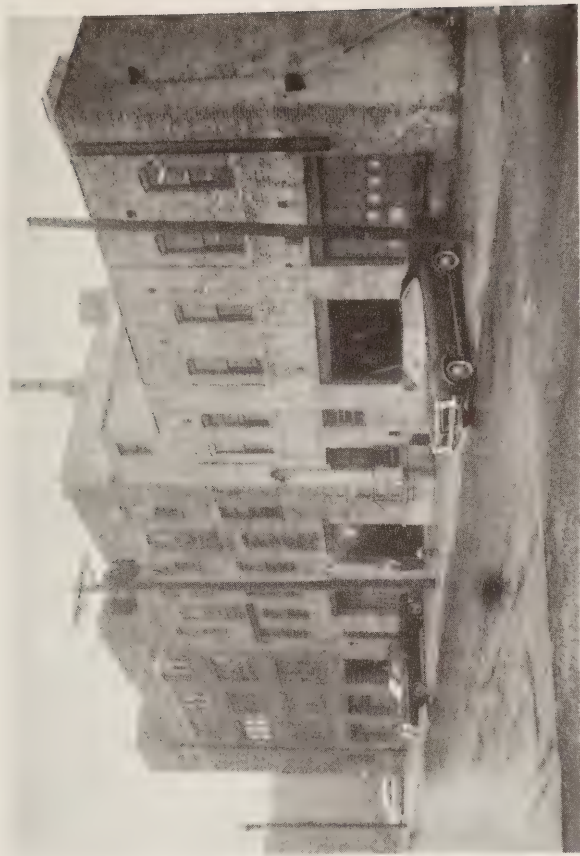


Green, between York and Grand Streets



Essex, between Green and Hudson Streets

Examples of Buildings in Condition Category 5



Sussex near Van Vorst Street



Van Vorst and Morris Streets



Van Vorst and Morris Streets

The amount of employment, land area and floor space in each area, represented by each of these categories, was ascertained for each of the areas (and is shown on the print-outs which accompany this report). The total amount of employment, land area and floor space in each of the condition categories, is shown below in Table 14. This table shows that more than half of the employment surveyed worked in the 51 buildings with the lowest or best scores. This twenty percent of the buildings surveyed also accounts for more than thirty-five percent of the land area and forty percent of the building area. The 51 buildings which had the poorest scores or worst twenty percent accounted for only six percent of the employment, about fourteen percent of the land area and less than eleven percent of the building area. This suggests that if it were to be city policy to remove or to have levelled those buildings in the worst condition have them replaced by new industrial buildings, it is possible that 15,000 persons would be employed instead of the 2,000 in the two worst categories.

TABLE 14

EMPLOYMENT, LAND AREA AND BUILDING AREA
BY CONDITION CLASSIFICATION JERSEY CITY
1966

<u>BUILDING CONDITION</u> <u>CLASSIFICATION</u>		<u>EMPLOYMENT</u>	<u>LAND AREA</u>	<u>BUILDING FLOOR</u> <u>AREA</u>
Better	1	8,498	3,082,000	3,272,000
	2	6,613	3,092,000	4,546,000
	3	1,509	2,162,000	1,308,000
	4	1,755	1,467,000	1,414,000
	5	2,673	1,213,000	3,025,000
	6	1,295	1,197,000	1,168,000
	7	1,078	871,000	1,050,000
	8	1,369	1,056,000	1,149,000
	9	743	1,554,000	976,000
Poorer	10	959	675,000	1,134,000
		26,492	16,369,000	19,050,000

Source: Arthur D. Little, Inc.

These distributionships are expressed in Table 15 below:

TABLE 15

PERCENTAGE DISTRIBUTION OF EMPLOYMENT LAND
AREA AND BUILDING AREA BY CONDITION CLASSI-
FICATION, JERSEY CITY, 1966

<u>BUILDING CONDITION</u> <u>CLASSIFICATION</u>		<u>EMPLOYMENT</u>	<u>LAND AREA</u>	<u>BUILDING FLOOR</u> <u>AREA</u>
Better 	1	32%	18%	17%
	2	25	19	25
	3	6	13	7
	4	7	9	7
	5	10	8	16
	6	5	8	6
	7	4	5	5
	8	5	6	6
	9	3	10	5
Poorer	10	3	4	6
		100%	100%	100%

Source: Arthur D. Little, Inc.

A weighted average score of the condition of buildings was computed for each area. These scores are shown below in Table 16 which shows that Area 4 has the highest proportion of buildings in the poorest condition and Area 7 has the lowest such proportion.

TABLE 16

WEIGHTED AVERAGE SCORE FOR AREAS OF CONDITION
OF BUILDINGS (BUILDING FLOOR AREA)

<u>AREA</u>	<u>SCORE</u>
1	64
2	53
3	37
4	71
5	34
6	33
7	29
8	53
9	62
10	32

Source: Arthur D. Little, Inc.

C. CONCLUSIONS AND SUMMARY

A comparison of Table 10 with Table 16, reveals that those areas which have the poorest environmental rating, also are the same areas which contain the largest proportion of buildings in the poorest condition. This is shown in Table 17. Area 4, for example, has the largest number of environmental deficiencies, and also the largest amount of buildings in the poorest condition. We have noted above, however, that the problems of Area 4 are primarily residential, rather than industrial and hence residential renewal is needed here. Table 17 shows that Area 1 is the second poorest, with respect to both buildings and environmental appearances. Area 1 should be relatively high on the priority list to receive action in the form of industrial renewal and rehabilitation. Some action, for example, could take place immediately to fence in the junk yards. The same comment applies to Area 9 and it should also be a high priority area.

TABLE 17

A RANKING OF AREAS IN TERMS OF ENVIRONMENTAL
AND BUILDING CONDITIONS

(From high (poor) to low (good))

<u>ENVIRONMENTAL CONDITION</u>			<u>BUILDING CONDITION</u>	
Poor	Area	4	Area	4
		1		1
		5		9
		3		2
		9		8
		7		3
		6		5
		2		6
Good		8		7

Source: Table 10 and 16

To summarize our recommendations for the other areas: the city could assist private industry in developing Area 2 as a center for loft-type manufacturing activities which are leaving Manhattan by improving the off-street parking facilities and by providing better transportation. Very little can be done with or for Area 3 aside from renewal, other than adding additional open space which is badly needed, particularly near the public housing and eliminating the parked junk trucks.

As noted above, the southern part of Area 4 is probably an apt location for the present uses at this time and eventually complete renewal will be called for north of Grand Avenue. The appearance of the junk yards should be improved in Area 5, and the Lafayette Industrial Park should be encouraged. Residential expansion should be fostered in Area 6, with the exception of Colgate for which adequate expansion and a consolidation of holdup should be provided for by the city, and the possibility of a Marina investigated. Area 7 requires improved transportation before any other action is called for. Some of the residences abutting the utilities and older plants should be renewed and more open spaces and parking areas increased. Area 8 would benefit from beautification and a moderate amount of renewal at the easternmost extremity.

The city or Area Development Council might begin to acquire a list of prospective tenants if Arvey were to leave its present site in Area 9 in order to replace this major use. The junk yards might also be fenced in and improved in this area in the immediate future. In the long run, however, both this area and Area 1 will require rather extensive and complete renewal treatment.

V. A Programmatic Approach to Industrial Renewal in Jersey City

A. Introduction

In this section we shall consider the basic mechanisms underlying an industrial renewal program. To assist and to add realism to our discussion, four areas in Jersey City have been singled out as case studies and we will focus on the administrative, legal and financial measures necessary to effect industrial renewal in these locations.

At present there is one quasi public-private agency which is concerned with industrial development in Jersey City. This is the Area Development Council. Because it plays an integral role in the promotion of economic activity in Jersey City we will first turn our attention to suggesting ways in which its functions might be strengthened and enhanced. In so doing we will suggest other governmental aids which might be available to Jersey City for industrial renewal. Next we will enumerate a program strategy which might be followed in four typical industrial renewal areas in Jersey City. And, finally, we will offer a number of other conclusions and recommendations.

B. Current Practices in Industrial Development

The Area Development Council is the recognized quasi official industrial developer in Jersey City. It has been in existence since July, 1964. This organization receives approximately one-half of its \$50,000 budget from the City which is earmarked for advertising and promotion. Private business interests, both directly and indirectly through the Chamber of Commerce, furnish the other \$25,000 which is used primarily for administrative purposes. The executive committee of the Council comprises about two dozen of the City's leading businessmen as well as the City's Planning Director and City Treasurer. The current chairman of the executive committee is Robert M. Wolf, a local realtor. About one dozen of these individuals attends the bi-monthly meetings. The Council is composed of a staff of one man plus research and secretarial assistance which is furnished by the Chamber of Commerce in whose premises the Council is presently housed.

There are four functions which the Area Development Council now performs. These are:

1. to attract new industry and commerce to Jersey City;

This is done by promotion, direct mail and newspaper advertising, public relations, by developing liasons with industrial realtors in the New York metropolitan area and, to a very limited extent, by having booths at conventions.

2. to stop industry from leaving Jersey City and to work with those firms who have problems in Jersey City;

This is accomplished by working with the appropriate city agency for better public facilities and by working with the city so that private enterprises can more easily acquire City owned or privately owned properties. In addition, the Council works with the banks, telephone companies and public utilities which comprise a communication network concerning industrial migration. Finally, an informal liason committee has been formed to ferret out the businessman's problems.

3. to build an image of Jersey City;

This is done by advertising, promotion, brochure preparation and word of mouth.

4. to advise on financing sources;

This is done by putting firms seeking financial assistance in contact with companies and other parties who are in the business of furnishing capital.

We have been asked to evaluate the efficacy of the Area Development Council and our general conclusion is that, in so far as it goes, it is doing a good job and performing a valuable service to the City. The present executive director is able, energetic and personable and the organization is apparently successful in each of its four functional areas.

C. Suggested Future Practices in Industrial Development

Our major reservation is that, as presently constituted, the objectives of the Area Development Council are too limited. To a great extent, this is because it now has inadequate tools to do a larger job. Integral to the success of any municipally sponsored industrial development program are three basic ingredients which are not now extant in the present structure of the Area Development Council:

1. close if not intimate rapport with city officials;
2. the ability to assemble land;

3. the capacity to fund industrial projects, i.e., to purchase or lease buildings or land or to make capital available to do so.

It is essential that a better working relationship develop between the Area Development Council and City officials. In our judgment, familiarity breeds respect and understanding while distance breeds disinterest and a lack of appreciation for the other organization's problems. In order that this latter situation not develop we recommend that the office of the Area Development be moved to City Hall. It would probably be most desirable if the staff could be housed in a suite of well appointed private offices near an entrance on the first floor so that businessmen would have ready access to it. Such a move might well take place in the very near future, even before the Community Renewal Program is completed.

We have suggested above that this Agency have the power to assemble land and since it would be within the municipal structure it could use the city's power of eminent domain to do so if it had to. We wish to emphasize, however, that the Redevelopment Authority is the official agency presently constituted to perform this function and they should not abdicate this function to the new Economic Development Agency, rather supplemental ability by the E.D.A. to obtain land might someday be a feature that would be desirable and hence provision should be made for this eventuality.

A revitalized and expanded agency would also not be in conflict with the Division of Planning. It would have action orientation in the field of economic concerns whereas the Division of Planning has a longer-run view point. The organization should assume a number of new responsibilities. It might have, for example, a new function which would correspond to acting as the Mayor's staff assistant for economic affairs. As such the agency would need an increased staff. It would require a trained economist who could furnish the administration with economic intelligence. This individual might prepare, for example, an annual economic message for the mayor on the State of the Economy of the City in the same fashion as the Council of Economic Advisors submits to the President a yearly status report on the economic health of the country and prospects for its future growth. Other new functions for the agency would include:

1. serving as a one-stop service center;

In a city the size of Jersey City, manufacturers find it difficult to pinpoint the appropriate City agency handling a particular problem. The problems may be minor (a request for setting aside a street area for truck loading, the need

for a special permit, etc.) or they may be major (a street closing to permit plant expansion) but all problems assume major importance if a great amount of time and effort is required to obtain help. The problem is particularly acute for small manufacturers who are not members of a special interest group and who, in the past, have tended to avoid contact with municipal departments and red-tape entanglements.

There is need in Jersey City for a service which makes it possible for the manufacturer to call or visit one place to obtain answers to questions about permits, zoning changes, building codes, tax procedures, off-street truck loading requirements and the like. The service should be well advertised so that its availability is widely known. Cities as small as Portland, Maine, have recognized this need, as have cities as large as Chicago.

2. providing locational assistance;

When a public project displaces a firm, the City has an obligation to assist it in finding a suitable new location. Federally-assisted Title I projects provide for such assistance and allow payments to cover the cost of relocation. The special requirements of manufacturers, the effect of location on business, the avoidance of additional moves are all reasons for special attention.

The locational assistance provided should not duplicate or compete with that provided by private industrial realtors; but rather it should supplement and assist the realtors in their efforts to relocate clients. Public assistance should be confined to situations where industrial operations have been displaced by public projects. The main objective is to assist the manufacturer by providing him with a broad spectrum of space availability in Jersey City, by helping him to select the area or areas that most closely meet his needs, by identifying potential future renewal areas to enable him to avoid another relocation and by providing him with a list of industrial realtors whom he can contact to find appropriate space in the areas that appear to be most suitable.

3. providing assistance in relocation financing;

One of the very important aspects of industry relocation is the cost of such relocation and the difficulty of obtaining financing for new space.

When federally-assisted Title I and some of the City or State-assisted redevelopment projects result in the displacement of firms, allowances for moving and relocation expenses are made, up to \$25,000, and up to an additional \$25,000 if the city agrees to bear one-third of the cost.

From time to time, firms will find it difficult to obtain the necessary financing when forced to relocate. Assistance to manufacturers in their efforts to arrange financing, by helping them to find appropriate sources, can be a useful function.

4. working with public and private agencies and groups to develop meaningful information upon which policies and programs for economic development can be based and assisting in the design and execution of special studies of problems relating to economic development.

Situated within City Hall and working in tandem with other municipal officials, this agency would present a united front to the business community

D. The Structure of an Industrial Development Corporation

This agency should "spin-off" a separate identity which might well be called the Jersey City Area Development Corporation which would also operate within the auspices of City government; that is, its employees would be members of the City's pension fund and it would certainly be considered a branch of City government. The Board of Directors of this new corporation might consist of six men appointed by the Mayor, six men appointed by the Chamber of Commerce and one man appointed by these twelve men. It should have an operating staff of two or three people plus clerical and secretarial assistance. Since it would operate within the municipal framework this corporation could, therefore, exercise the power of condemnation and eminent domain to acquire land and buildings for the public welfare. The power of a municipality to construct, sell, lease-sell or lease an industrial building through such a corporation appears to have been established by The Urban Renewal Non-Profit Corporation Law of 1965, and most legal observers believe that the court would uphold such power within renewal areas.¹ This law provides for the creation of a non-profit urban renewal corporation to undertake projects and projects are defined in this law as the undertaking and execution of the redevelopment of blighted areas, in whole or in part, with project costs being further defined to include the cost of land acquisition and construction costs.

¹ In New York State, for example, the Cannata case established industrial renewal as a public purpose.

The Area Development Corporation should be incorporated as a non-profit quasi municipal agency and, hence, be exempt from Federal income tax. Internal Revenue Ruling #63-20 exempts non-profit Industrial Development Corporations from Federal income taxes when certain conditions are met such as eventual reversion of assets to the City of Jersey City. Contributions to a non-profit corporation of this nature would apparently qualify as a business expense. The stock of the corporation would be held by either the City or the Board of Directors.

There are at least two other fiscal advantages to incorporating this agency within the municipal structure. In the first place, such a status permits the Area Development Corporation to issue obligations if it cared to (see below) which would carry tax free interest. Therefore, such money would cost about 2 points less than would otherwise be the case. In addition, the banks would be more apt to loan to prospective builders or to new tenants for machinery and equipment if the faith and credit of the City were behind the prospective indebtedness.

In order to be competitive with other cities in the New York metropolitan region, the Area Development Corporation should be in a position to offer or arrange for financing. The City of New York, for example, is in a position to provide 100 percent financing to corporations that want to build or lease industrial facilities in one of the five boroughs. This is typically done by securing a loan for 40 percent of the total cost from the Small Business Administration, by acquiring a loan for another 30 percent of the cost from the New York Job Development Authority, by arranging for 20 percent of the cost to come from a loan from the New York Business Development Corporation and by getting the final 10 percent of the project cost as a loan from a local bank.

With the single exception of the Job Development Authority, each of these services is available to be tapped for industrial development and industrial renewal in Jersey City. Section 502 of the Small Business Investment Act of 1958 empowers the Small Business Administration to make loans to local non-profit development companies such as the Jersey City Area Development Corporation, whose principal purpose is the advancement of the local economy. These loans may be used to finance the construction, modernization or conversion of plants, including the purchase of land, machinery or equipment. They may not be used for working capital or for debt repayment except for debt related to construction of the project involved.

A development credit corporation, using the relevant provisions of the Small Business Investment Act of 1958, might be able to establish cooperatives of small Business firms to construct in-town industrial parks or other facilities. A device which merits serious consideration outside of the housing field is the organization of a condominium. A condominium would be even more suitable for a multiple-use industrial structure than for an apartment: this legal form of ownership would enable the industrial occupants of a building to bear the financial burden of their specialized facility and service needs individually, rather than equally, as they would as members of a cooperative.

The maximum amount the Small Business Administration can lend a development corporation is \$350,000 for each small firm the corporation will assist. Loans are made at 5½ percent interest for as long as 25 years. Collateral is usually a trust mortgage on the project to be financed. In the eyes of the S.B.A., a local development corporation is one which is formed by a group of citizens who are concerned about their city's economic development and who purchase stock in the corporation. Therefore, Jersey City's Charter should be examined to see if it permits the City to organize a corporation in which the shareholders' stock is presumably held by either the City or by the Board of Directors of the Industrial Development Corporation.

The local Newark office of the Small Business Administration has advised us that in September, 1966, a number of small changes were made in their bank participation loan program. Under one new plan, for example, the S.B.A. can, in effect, guarantee up to 72 percent of the total investment with a maximum loan of \$350,000 although it is not able to make direct loans. Under another plan the S.B.A. will make a commitment for 40 percent of the first mortgage with the local bank with other institutions assuming the other obligations. This is what was done in the New York example cited above and which could be done in Jersey City.

As of July 1, 1965, these types of loans had hardly been used in New Jersey. Indeed, only two areas have received them. To a certain extent, this has been due to the red tape and inordinate length of time it has taken to process requests for funds. We were advised, however, that this type of delay is now no longer prevalent.

In the New York City illustration cited above the Business Development Corporation assumed 20 percent of the total indebtedness. The New Jersey Business Development Corporation is located at 54 Park Place in Newark, New Jersey. We interviewed Mr. H. L. Junge, vice president and manager, and were advised that the Development Corporation's objectives were to arrange financing to attract new business into the State, to prevent New Jersey business from moving away, to enable new enterprises to start and others to expand and to parallel the planning of the Department of Conservation and Economic Development.

Loans may be made for new construction or for buildings which require alterations or renovation, moving and related expenses, for new machinery and equipment to expand production or to adopt new manufacturing techniques, for interim financing awaiting public offering, or for capital needed to finance a new business. However, the New Jersey State Law requires that the proposed loan be refused by two New Jersey banking institutions and that the Board of Directors of the corporation be satisfied that the loan is not obtainable from a financial institution transacting business in New Jersey.

In actual practice the loans are frequently made for second mortgages since banks cannot accept them. In other cases loans are made to companies that have no earnings record or to firms that want to use vacant land as collateral since the normal financial channels also preclude assistance in these instances. The rate of the loan is currently about 7 percent for first mortgages, 9 percent for second mortgages and between 8 and 9 percent for equipment or capital financing. There is no fixed limit on either the length of the loan or the amount to be loaned.

In the New York example cited above, the New York State Business Development Corporation supplied 20 percent of the total cost of the project and we would think that this type of arrangement could also prevail in Jersey City. The local bank also furnished 10 percent of the project cost and this type of loan could apply as well in Jersey City. The remaining 30 percent of the cost was borrowed from the New York Job Development Authority which has no counterpart in New Jersey.

The New York State Job Development Authority or JDA offers financial assistance in the construction, expansion or rehabilitation of industrial plants through the provision of "seed money" to complement funds from conventional private sources. The purpose is the creation of additional job

opportunities in the State. At present \$50,000,000 is available in a revolving fund for JDA purposes. However, under new State legislation, the revolving fund for 3½ percent loans is being increased from \$50 to \$75 million. Additional loan funds at market rates, or somewhat below, may also be secured.

JDA loans are made through local, non-profit industrial development corporations. Their use is restricted to construction, expansion or rehabilitation of a manufacturing facility. Buildings for research and warehousing connected with the manufacturing or industrial plant may be included; however, no loans are permitted for machinery or equipment, working capital or inventory.

Job Development Authority loans may be obtained at low (3½ percent) interest rates, generally for a 20-year maturity, on a second mortgage for up to 30 percent of the cost of land and buildings. Project cost may include necessary demolition of old structures, land improvements and installation of utilities. Mortgages given as security for JDA loans may not be junior to first mortgages by more than 50 percent of the project cost. Also, at least 10 percent of the project cost must be put up by the assisted firm in the form of equity.

There has been discussion about having comparable authority in New Jersey for some time but, in the eyes of the legislature, the overall State needs have, to date, not been such as to warrant the enactment of the necessary legislation. We would recommend, on the other hand, that in so far as the needs of Jersey City are paramount, such legislation be enacted as soon as possible.

At present, however, without such legislation the Area Development Corporation would arrange for loans to cover about 70 percent of the cost of a facility. The remaining amount would have to come from a bank, savings and loan association or other financial institution unless the Development Corporation itself had a source of available capital. Naturally, such funds would carry tax exemption and their interest would be below the market rate. They would thus have advantages for both the bond owner and for the mortgagee. In 1961, the regulations governing the investment policies of Federally chartered savings and loan associations were altered to permit loans to be made to development credit corporations. There are, however, a number of other sources which the Area Development Corporation might turn to if it wanted to seek investment capital of its own.

One such source of funds are tax increment bonds. When they are used investors are repaid with the interest developed from the tax increase. This tax increment is caused by the rise in property values resulting from the industrial redevelopment itself within a renewal area. The sale of this type of bond is legal in a number of states (e.g., Fresno and Sacramento, California, for example, have issued them). We have examined the New Jersey Redevelopment Agencies Law, as amended and supplemented, Section 40 (55-1.10) and note only that bonds of the Redevelopment Agency are legal investments and that their transfer and income is exempt from taxation. In other words, mention is not made of tax increase bonds and we would, therefore, suggest that the Jersey City corporation counsel examine the legality of tax increment bonds with respect to the New Jersey state statutes before further consideration is given to them.

At the present time, the City of Jersey City has reached, or has committed funds to reach, its legal debt limit of \$29,000,000. Therefore, the City's attorney should also examine the modus operandi of borrowing outside of this ceiling for urban renewal purposes.

In a type of revenue bond which the Area Development Corporation might wish to consider, the proposed industrial facilities themselves would be the collateral and their sale or rental would serve to pay off the accrued interest and bonded indebtedness. We have already noted the financial attractiveness of these bonds. Another method which is commonly used to acquire funds for construction is to borrow from a recognized source of capital when a company signs a lease and to construct a facility for them with a long term rental agreement.

Another possible source of funds lies in City-owned land which is now vacant. If this source were to be used, the City of Jersey City would transfer to the Area Development Corporation all of the presently underdeveloped land and/or undeveloped property which the City presently possesses. In return for this transfer, the City would receive from the ADC a note for the aggregate value of such property (as presently carried on - e.g. only City books). As the land is to be used as collateral for ADC funds, this note would be subordinated to any borrowings the ADC should choose to make, either against the general value of the land or against specific properties designated for ADC development.

All transferred land would constitute a fluid reserve to be used as the primary basis for ADC borrowings. The land would be appraised to establish a reasonable market value acceptable to lending institutions. On the basis of the appraisal, income debentures would be issued as a primary obligation of the ADC. These debentures would be issued as a primary obligation of the ADC. These debentures would not be a lien against specific pieces of land held by ADC, but only would require that no other general liens could be made ahead of the primary obligation.

Individual pieces of land, however, could be removed from the ADC's total stock either by sale, gift, or some other means, and conveyed to an ADC subsidiary, a City agency or private organization without permission of the prime lender. The only limiting provision in this event is that at no time should the aggregate market value of unencumbered land owned by the ADC, plus other unencumbered assets, be less than one and one-half times the amount of ADC's general obligations.

An important feature of this proposal is that land transferred to the ADC would still remain under control of the City in two respects. On the one hand, public control is exerted through the corporation's Board of Directors. If, as we suggest, the Board is composed in part by the Mayor's appointees then decisions regarding the land's use would be in accordance with City policies. On the other hand, ADC projects involving the acquisition and development of land will be subject to review by the City Council.

An additional feature of this proposal is that City-owned land which is being officially "held" for future use by a particular agency can be utilized by the ADC as part of its fluid reserve. Such land, if included in the transfer, would be carried with the appropriate "hold orders" intact. When an agency desired to acquire the property, ADC could then withdraw the particular parcel from its fluid reserve. This arrangement would not impair the ADC's borrowing capability, nor would it impair the planned use of "held" land. In this way, the ADC would not restrict or hinder current or future agency operations.

In the event that certain parcels of land should be sold by the ADC and the money returned to the City, or if the City desired the return of certain parcels for its use, the only limitation that would have to be observed is the debt-to-asset ratio agreed upon by the ADC and its creditors.

Finally, another source of funds which may be used for operating purposes for the agency is to be found in the State of

New Jersey.¹ Financial assistance is available to non-profit municipal corporations that are concerned with economic development through the State Economic Development Assistance Act of 1966. (Chapter 130, P.C., 1966, Approved June 17, 1966) This law provides that the Commissioner of the Department of Conservation and Economic Development will authorize the making of a matching grant to a city-sponsored agency such as the Area Development Corporation. This grant is not to exceed 50 percent of the funds allocated by the agency to the program described in its application for the funds. These grants may be used to make studies, surveys and investigations and to carry out planning and promotional programs. The studies might include community fact sheets, compilation of industrial sites by size and characteristic and usage as well as vacant buildings. Up to 25 percent of the grant must be used for salaries, 25 percent for special services and 50 percent for surveys and advertising material. Since the City of Jersey City is currently providing \$25,000 to the Area Development Council for this set of services, it would seem that a judicious application might shift the burden for the cost of these services from the City to the State, thus freeing the use of City funds for some other purpose.

E. The Organization and Administration of Industrial Renewal

We have recommended, in effect, that the existing Area Development Council be melded into the City Administration to carry out a number of service functions and that a separate legal entity which we have termed the Area Development Corporation be created to assist in the execution of industrial renewal per se by acquiring land, erecting buildings and marketing projects. This corporation would not supplant the work of the Redevelopment Agency which would still be concerned with preparing survey and planning applications, absorbing the write down on the cost of the land and all the other necessary steps in the renewal process, but rather would supplement it by pursuing active development as provided for in New Jersey Senate Bill #281 (May, 1965).

This Act authorizes non-profit urban renewal corporations to undertake redevelopment in blighted areas with the understanding that although the improvements thereby created will be exempt from taxes for a period of 20 years, the net profits of the non-profit corporation will go to the City. The corporation is specifically authorized to develop, construct,

¹ We have not considered assistance from the Economic Development Administration since Jersey City has currently a 3.4 percent unemployment rate and therefore would not qualify for this type of federal aid.

maintain and/or alter industrial buildings. The bill was designed to enable municipalities to undertake those projects which because of condition or size do not attract private redevelopers. To date this Act has been used sparingly in New Jersey, although it has been applied in Newark. In this instance, however, a number of local problems (which we have tried to circumvent in the schema suggested above) arose to thwart the success of the program.

As mentioned above, the staff to carry on such a program would, in all likelihood, initially require two or three professional persons. The eventual size and makeup of the staff will depend upon its rate of development and expand as its activities expand. Initially, there will be a need for an executive director who would have to have a financial-real estate background with an industrial promotion bent, an urban economist and possibly a landscape-architect-planner. Other services could be purchased as required to minimize staff requirements in the early stages. As projects develop, skills can be added and capabilities increased. The operating budget for the first year is difficult to estimate, but we suspect that it might approximate \$100,000.

If the City of Jersey City does not choose to adopt this type of institutional arrangement, another organizational structure is possible although we do not favor it. Title 40, Chapter 55B of the revised New Jersey Statutes authorizes the creation of a seven man Industrial Commission for cities such as Jersey City. The Commission is empowered to make studies and surveys, to advertise, to solicit industries to purchase or to lease vacant land owned by the City or other parties, to acquire title and to sell municipally owned vacant land to industries. Although these are all worthwhile functions and should be carried on by the organization we have suggested above, the Commission is not accorded any power of condemnation or eminent domain, nor can it pledge the credit of the City, nor create any debt against it, nor can it construct any building or finance any such construction and without these powers this Commission will, in our judgment, be severely restricted in its operational effectiveness. This type of Commission operates in five counties in New Jersey and in the City of Elizabeth.

F. A Recommended Sequence of Action for Industrial Renewal

We recommend that Jersey City should consider pursuing the following course of action:

1. The Area Development Council as presently constituted should be located within City Hall as a City agency and called the Economic Development Agency.

2. Its functions as presently conceived should continue.
3. It should also provide a "one stop" (one agency) service, locational assistance, assistance in relocation financing, and economic intelligence to the Mayor.
4. A separate non-profit Area Development Corporation should be established with some of its operating funds furnished by the State through the Economic Development Assistance Act of 1966. The stock of the corporation would be held by the City or the Board of Directors which would be selected in part by the City. As authorized by S.B. 281 this corporation would act as a developer in industrial renewal areas.
5. The Area Development Corporation would also provide financing to prospective developers. It would have its own capital from S.B.A. 502 loans, and from issuing tax-free bonds (either revenue or increment ones as explained above). It would facilitate bank loans, and loans from other S.B.A. programs as well as loans from the Business Development Corporation so as to provide 100 percent financing.

If this type of program were to be established, industrial renewal would take place in the following fashion:

- 1) Project proposals would emanate from the Division of Planning based on the findings of the Community Renewal Program.
- 2) Feasibility and marketability studies would be made by the City's Economic Development Agency (the reconstituted Area Development Council).
- 3) Survey and planning application would be prepared by the Division of Planning in cooperation with other city agencies.
- 4) The Jersey City Redevelopment Agency would prepare a renewal plan including detailed cost estimates and recommendations to proceed with or without federal assistance. If the plan is prepared without federal assistance, funds from the non-profit Area Development Corporation would be used or funds from the city.

- 5) The Planning Board and City Council would declare the area blighted under the New Jersey Blighted Areas Act.
- 6) The Redevelopment Agency acquires the land and executes on-site improvements with federal aid or with City funds from borrowing outside the debt limit.
- 7) If federal aid has been exhausted, the Area Development Corporation acquires the land and executes on-site improvements with their own funds. Federal aid in industrial renewal projects is currently limited to 30 to 35 percent of the total aggregate capital grants awarded nation-wide.
- 8) The plan is adopted by the City Council on recommendation of the Planning Board, Redevelopment Agency, Board of Directors of the Area Development Corporation, and Mayor's office for Economic Development.
- 9) City donates city-owned land if applicable and either the Area Development Corporation or the Redevelopment Agency acquires title to it.
- 10) The Redevelopment Agency endeavors to sell the land to a private developer directly as is the current practice. The developer establishes a renewal corporation so as to qualify for the tax exemption privileges of the Urban Renewal Corporation Act of 1961 (L. 1961, Chap. 40. R.S. Cum. Supp 40: 55C-40) sometimes referred to as the "Fox-Lance-Crane Bill". This corporation works with the Redevelopment Agency in the execution of the project.
- 11) If the developer is a private investor wishing to build a speculative facility to rent or to sell, this bill grants an exemption to his corporation from property taxes on all improvements in the project for a period of 15 years although he must pay a service charge to Jersey City which, together with taxes on the land, equals 15 percent of the gross rental income from the project.
- 12) If the developer is a private firm wishing to build its own facility, this same law calls for the firm to establish its own urban renewal corporation or subsidiary under whose authority the project would

be constructed. The profits of this subsidiary company which would own the facility would be limited as in the case of the private developer.

- 13) If an acceptable private developer is not forthcoming within a reasonable period of time, the Area Development Corporation under S.B. 281 acquires the land with its own funds. It is able to offer municipal interest rates since it is in effect a city agency issuing tax-exempt bonds.
- 14) The ADC then develops the land and constructs building and sells, leases or leases back the facilities, as the case may be, to space users. The physical planning might take place in either the Redevelopment Agency or in the Division of Planning.
- 15) Any profits which accrue to the Area Development Corporation would be returned to the City. The ADC will thus operate as a developer if federal funds are not used or if a private developer cannot be found.

G. A Case Study Approach to Industrial Renewal

1. Introduction

In order to indicate how the rganizational framework suggested in the previous section would apply we were asked to discuss how industrial renewal would operate in four different situations. The basic problems in each of these four case studies are unique and different. In the first case, Holland Tunnel North, the primary consideration is industrial expansion on under utilized industrial land. The second instance, Tonnele Circle, exemplifies the need for parking facilities and supporting industrial service in a blighted industrial land to residential uses, and finally, the last case study, the Lafayette Industrial Area, describes an approach to developing an urban industrial park.

2. Holland Tunnel North

Holland Tunnel North or Holland Tunnel Number Two as it might be called, is located just to the north of the area currently being renewed. It is located within Industrial Study Area No. 3 and specifically covers tax assessor's blocks numbers 327, 328, 329, 330, 331, 332, 364, 365, 366, 367 and 367½. The site is located between Jersey Avenue and Monmouth Avenues and between Fourteenth Street and Hoboken Avenue. The National Union Electrical Company has a very large plant for their Emerson Radio and

Phonograph division covering the area between Fourteenth and Sixteenth Street and Coles and Monmouth Streets. They are reported to be seeking additional room for expansion and one of the objectives of an industrial renewal program in this area would be to furnish them--or other interested industrial firms--with such space. The Pepsi-Cola Company has recently erected a bottling facility on Jersey Avenue between Sixteenth and Seventeenth Streets and they use some of the contiguous blocks for parking. The only other prominent facilities are those of the Jersey Forge Company at Jersey Avenue and Sixteenth Street which, although in poor condition, was not examined in our condition survey and an old warehouse at Seventeenth and Cole which was rated as being in "very poor" condition. The facilities of both Emerson and Pepsi-Cola received "very good" condition ratings while a shack on block number 366 received a "fair" rating and a new cinder block trucking office in the same block was awarded a "good" rating. The only other facility in the area covered by our industrial building condition survey was a structure on Jersey Avenue between Seventeenth and Eighteenth Streets which was given a medium or fair to good rating. The other blocks in the area were not examined because they either contain auto junk yards and parking facilities or are vacant. The latter activities epitomize under utilized and blighted blocks.

There are no residential or community facilities in the area, although a public housing project is to be found on the east side of Jersey Avenue between Fourteenth and Sixteenth Streets. We have been advised that Emerson is seeking a one-story building but it is probable that a two story structure would suffice. We have also been informed that they require about 600,000 additional square feet or a land area of about five blocks (if we assume two stories, a building coverage of 66 per cent and two acres to the block). Blocks 327, 328, and 366, 367, and 367½ which abut the Emerson property would appear to have sufficient acreage for their needs. The west side of block 329 might eventually contain a multi-level parking structure which Pepsi-Cola and other firms might use while the other blocks (with the exception of blocks 364, 365, and the east side of block 329 which house Emerson and Pepsi-Cola) would be cleared of their blighted conditions so that higher and better industrial uses could be constructed on them. This would involve no relocation of families and a minimum relocation of two or three firms: e.g. The Jersey City Forging Company, and the various trucking offices which might be better located in the open areas near Route 440.

We think that the following strategy might well be adopted to facilitate the upgrading of this area:

1. Before taking any actions, every effort must be made for private actions to occur. Specifically, Emerson should try and purchase the requisite property in the private market. This presumably has been done and either the owners are too numerous or the price is too high or both situations prevail, and therefore this solution is not feasible.
2. The area as described above should be declared blighted by the City and Planning Board and the Redevelopment Agency would use the power of eminent domain to acquire it.
3. The junk littering the streets should be cleared.
4. The normal redevelopment process should be followed. Since Jersey City has had no pure industrial renewal projects to date and since 35 percent of the appropriations to the Federal Department of Housing and Urban Development can be used for non-residential renewal, we presume that this could be a Federally funded project, depending upon the availability of funds.
5. The National Union Electrical Company should form a subsidiary corporation to acquire and to develop the blocks they need from the Redevelopment Agency under the provisions of the Fox-Lance law as explained above.
6. Other developers should be solicited. For example, it is likely that Pepsi-Cola would be interested in building a parking structure for their trucks which should be designed into the project by the planning staff. This firm would also establish a subsidiary corporation so as to qualify for tax exemption under the Urban Renewal Corporation Act, or the Parking Authority would construct the facility with a guaranteed lease from adjacent firms.
7. If these developers are not forthcoming, the Area Development Corporation should construct the building shells after the existing blocks have been cleared and lease or sell them to manufacturers.

We cannot foresee that any street realignments will be necessary in this project. It is conceivable, however, that the plan for the area might call for the closing of Sixteenth and Seventeenth Streets west of Coles Street, and for the widening of one or two thoroughfares. However, sewerage construction is contemplated in this area, but its cost would not be applicable to this project. The range of reuse values should be between

\$.50 to \$1.50 per square foot for the land and about \$2.00 for the building. The cost of construction will be about \$10.00 per square foot.

The proposed urban renewal area appears to meet the Federal eligibility requirements as defined in Sections 3-1 and 10-1 of the Local Public Agency Manual. The area also appears to meet the eligibility requirements for redevelopment as set forth in the law, Title 40--Chapter 55-Section 21-1-4 and Chapter 55C-Sections 1 to 39 of the New Jersey Statutes.

A preliminary and tentative set of cost calculations for renewing this area was prepared by Alvin E. Gershen Associates¹ in consultation with members of the Redevelopment Agency, the Division of Planning and ourselves. These figures indicate that the gross project cost will be approximately \$2,500,000, and the net project cost is estimated to be slightly under \$2,000,000. Some of the basic assumptions in the computation of these estimates were: (1) that the land would sell for \$1.00 per square foot; (2) that the size of the area would be 12 acres and (3) that the basic acquisition cost would be \$2.00 per square foot; (4) that the total assessed valuation for the land and improvements was slightly in excess of \$1,000,000; (5) that the total real estate purchase was about \$1,200,000 and (6) that the land could be disposed for \$580,000; (7) that the total new construction might amount to \$6,000,000; (8) that the unassisted cost (e.g. without federal aid) would be \$3.00 per square foot. On the basis of these data the cost to the city for this project would be approximately \$660,000.

In conclusion it should be emphasized that the above figures are preliminary and tentative estimates and are designed to indicate the general magnitude being considered. This area is only suitable for industrial use but the entire city would benefit if the vacant and under utilized blocks in this project were transformed to a prosperous economic use. Finally, since this area abuts the viaduct leading to the New Jersey Turnpike, it is truly one of the major entrances to the Garden State and as such good design should prevail and predominate. A well designed industrial complex would enhance one's image of New Jersey as one of the leading manufacturing states in the Union.

¹ A more complete fiscal examination of this and the other three areas will appear in their report.

3. Tonnele Circle

The industrial renewal area which has been termed Tonnele Circle is to be found in Industrial District No. 7. It encompasses six tax assessor's blocks. These are numbers 636, and 638, which are on the north side of St. Paul's Avenue, south of the General Pulaski Skyway and west of Tonnele Avenue; blocks 639 and 640 which are north of the Skyway, south of the Delaware, Lackawanna and Western Railroad, and east of the New York, Susquehanna and Western Railroad tracks; and blocks 597 and 613½ which are west of Tonnele Avenue, north of Newark Avenue and south of Dey Street.

The two things these six blocks have in common is the fact that they are all contiguous to the American Can Company and that they contain some blighted residential structures. We do not mean to imply, however, that all the residences on these six blocks are blighted but this is true of the vast majority. The residents who live between two railroad lines or next to a very noisy factory or a major elevated highway have neither neighborhood community facilities (other than one church on the corner of Tonnele Avenue and St. Paul's) or amenities. On the other hand, it is obvious that there is a shortage of parking spaces for the cars of the employees of the American Can Company and Western Electric Company and that the former has leapfrogged the residences in order to get warehouse space in block 690. Therefore, we suggest that the blighted residential structures and the Arkay plant, whose structure on block 597 is in "very bad" condition according to our condition survey¹, be replaced by parking facilities or whatever other use the American Can Company or other developers might want to make of these properties.

We believe that such a project may qualify as a renewal project under the relevant United States and New Jersey statutes which were cited above. However, the same dictum applies in terms of strategy. That is before this area becomes a matter of public concern we think the American Can Company should seek to acquire the land itself.

¹ Our condition survey found the new warehouse on block 690 to be in "very good" condition. This category also applied to the Western Electric facility and to the major American Can building. The other American Can Company building was in "good" condition. Since our survey was restricted to industrial buildings it did not cover residential buildings.

The public powers should only be employed if and/or when such a course of action fails. First priority should then be given to blocks 639 and 640 with second priority to block 638 and to block 636 (other than the properties fronting on Tonnele Avenue).¹ On these blocks clearance is desirable. Next spot clearance is called for in block 597 (e.g. the Arkay structure at the west end of the block) and final priority should be given to the residential structures (other than those fronting on Tonnele Avenue) on block 613½.¹

The Parking Authority should be contacted to see if they would be interested in acting as a redeveloper and indeed if they are empowered to do so. If such is not the case, a private developer should be sought or the Area Development Corporation requested to build the needed parking structures. Any planning of the area would be done in close cooperation with the American Can Company and Western Electric. It is conceivable that they would elect to become the developers under the Fox-Lance-Crane Bill mentioned before. Certainly their needs for expansion should be incorporated into the plan which will be prepared by the Redevelopment Agency. We would expect that this project would qualify for federal assistance and that the renewal process would proceed in the conventional manner.

A set of preliminary cost calculations were made for this area by Alvin E. Gershen Associates. These tentative figures indicate that the area has about 8½ acres of 375,000 square feet. The acquisition cost would be approximately \$860,000 with the remaining costs over \$1,000,000, and therefore the gross project cost would be about \$1,900,000.

If the land were to be sold at its reuse value for parking of \$1.00 per square foot, the net project cost would be \$1,500,000 and the city's cost would be roughly \$500,000. Not included in these figures are the relocation costs of the approximately five dozen families which might be displaced. Although we do not favor residential removal per se, the living conditions of these people will be immeasurably improved by being relocated from this blighted area. Concomitantly, the parking which will replace these structures will take cars off the street and help speed traffic through the presently congested area. As a consequence of these set of renewal actions, the residents, the companies involved, and the City itself all stand to benefit.

¹ The housing facing Tonnele Avenue on both blocks 613½ and 636 is well maintained.

4. The Junction Area

This area is to be found within Industrial District No. 1 and it covers the tax assessor's block numbers 2056, 2057, 2058½ and 2078. This latter block is the location of the Jersey City Printing Company. These four blocks are north of Communipaw Avenue, south of Johnston Avenues, west of Lafayette Park and east of the Lehigh Valley Railroad spur line.

The Jersey City Printing Company has a lease on its current facilities which expires in about six years-- i.e. 1972, and we have been advised that they are seeking additional room for expansion. We were informed that their immediate needs are 40,000 square feet while their long term requirements are three times this amount. We would think that they would seek temporarily to expand into adjacent industrial facilities on block 2058½. Although printing facilities require heavy load bearing floors because of the weight of the presses, we believe that these premises-- or at least their first floor--would be suitable for such an operation. These facilities which once were a rope factory have about twice as much floor space on their ground floor as the existing printing plant possesses.

For any number of reasons, however, the Jersey City Printing Company might not want to purchase or to lease these facilities and if this occurs they will wish to abandon their present plant and move elsewhere. The City of Jersey City should make every effort to find suitable space for them in either the Lafayette Industrial Area (reinforced with pilings because of the poor load bearing quality of the soil), in the Route 440 area, or elsewhere within the city limits.

If Jersey City Printing Company does in fact leave their present quarters we believe that this area should be reconverted to residential use. This is so because it abuts a park and is only one block from a grammar school. This project could probably exclude the old Western Union Storage facility which faces Communipaw since this building has a different orientation from the industrial complex on the northern part of the block. Moreover, while the set of buildings in the industrial complex received the worst rating or "poorest" condition classification in our condition survey, the Western Union building received a slightly better rating (the Jersey City Printing building received the second best rating). Such a strategy involves the transition of the area from an industrial one to a residential one and since the majority of industrial facilities are so blighted,

this project would qualify for and be eligible for Federal assistance.

It is likely that the renewal plan will call for the removal of all the aforementioned industrial structures and the upgrading of Lafayette Park. Additional public utilities, water lines and sewage facilities might have to be added and consideration will certainly be given to the opening up of Manning Avenue on the west side of the park since it is currently closed.

A set of tentative and preliminary cost calculations were made for this project. It was computed that there were about 510,000 square feet or about 12 acres on the site and that it's acquisition cost would be in the neighborhood of \$1,700,000, or slightly in excess of \$3.00 per square foot. About forty per cent of this cost was attributable to the Jersey City Printing Company building. The gross project cost worked out to be about \$3,000,000. The net project cost would probably be about \$2,500,000, with the City's share approximately \$860,000.

5. The Lafayette Industrial Area

This area is contiguous with Industrial District 5. It encompasses assessor's block numbers 1476, 1478, 1480, 1485, 1487, 1490, 1491, 2002, 2005a, 2006, 2007, 2008, 2015, 2016, 2017, 2018, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, and 2032. The borders of this area are the Central Railroad of New Jersey on the east, the Newark and New York Railroad on the north, and Garfield Avenue essentially on the west. It is triangular in shape and was the subject of a special planning report in 1964 by the Division of Planning. We concur with the recommendations found in that report and add to them the fact that we think that this area is ideally suited to be developed as an urban industrial park. We have presented the standards which we feel should be adhered to in this development in the prior section.

Mention should also be made that our condition survey found the complex of buildings in block number 2033 to be in condition category five--the next to worst; on block No. 2032, the buildings were in the best category, No. 1; on block No. 2031 they were in category No. 5; on block No. 2030, they were in category No. 4; on blocks 2028 and 2029, one building was in category No. 4, one in category No. 5, and one in No. 6. The Westinghouse plant on block

2031 was found to be in category No. 1, while one of the buildings in block 2024 was in this category and another was in category No. 5. On block 2017 one plant was in category No. 6, one in category No. 5, one in category No. 4, and one in category No. 1. The plant on block 2008 was found to be in condition category No. 3 while the facility in block 1480 was in category No. 6, as was one of the two factories on block 1476 while the other establishment on this block received a 5 classification.

Because of their blighted nature, we have suggested elsewhere in this report that the spot removal of the structures on block 1476 and 1480 would appear to be in the City's best interest. This could be carried out by the Redevelopment Agency in the conventional manner with the ultimate reuse being residential.

If the remainder of the area is to be converted into an urban industrial park, the utilities and municipal services would require improvement and the junk yards would have to be removed. The threat of city action would probably motivate the major land owner in the area to more active land development. He is currently committed to one sale a year which is a rather slow pace.

The Area Development Corporation would seem to be the proper municipal organization to develop this facility with the planning being done by the Division of Planning and Redevelopment Agency. Using the entire kit of tools we have described earlier the ADC would acquire title to the land, develop it and market it. It might also construct buildings on the site. As a part of the development process, it probably would be desirable to stabilize the soil since a portion of the area is located on fill. Extensive soils investigations will probably be required prior to grading operations and installation of site improvements. Individual soils tests may be necessary for specific areas where structures are to be located.

Because of the adverse environmental conditions in the area, the obsolete building types, the overcrowding and improper location of structures, the detrimental land uses, the inadequate streets and utilities and the inadequate off-street loading, we are of the opinion that this area qualifies for federal urban renewal assistance. In order to remove these conditions of blight and prepare the area for reuse as a modern, efficient industrial park, the following actions should be taken by the ADC:

1. The removal of all structures deteriorated or dilapidated beyond the point of economic conservation.
2. The retention of those industrial structures capable of meeting the standards and requirements of the redevelopment plan for the area which is to be prepared by the Redevelopment Agency.
3. The realignment of streets to permit: (a) more efficient circulation of traffic, (b) the addition of excess street right-of-way land to sites for private development, (c) the replatting of parcels in order to create flexible and more efficient building sites for modern industrial development, (d) the provision of rail access to the building sites.
4. The removal of improper fill and the preparation of sites for development.
5. The provision of adequate public facilities and utilities.

Tentative cost estimates were made to arrive at some measure of magnitude. In these calculations consideration was not given to any costs for relocating industry which would be a minor expense at most. Part of blocks 2024 and 2017 were included in these calculations as were all of blocks 1476, 1480, 1487, 2007, 2018, 2028, 2029, 2031, and 2033. In total, this amounted to about 1,500,000 square feet and the cost of acquisition came out to be in excess of \$3,000,000 or more than \$2.00 per square foot. Because a considerable amount of planning is required before this area can be considered to be a viable industrial park it was not practical to state definitely the land's resale value. Preliminary indications suggest, however, that the gross project cost would be in the area of \$6,000,000¹ and the net project cost would be about \$4,700,000 with the City's share about one and a half million dollars.

6. Sequencing

It is obvious that not all of these projects can proceed at the same time. We recommend priority being given to them in the order that we discussed them. That is the Holland Tunnel North project should be first and the Lafayette Industrial Park last. In this latter case it will be some time before the Area Development Corporation will be in a position to operate as a developer of an urban industrial park. Before development can begin, a considerable planning effort will be required to design the park with its many required improvements.

¹ This figure includes about 1.5 million dollars for improvements as recommended in the report cited above.

H. Conclusions and Recommendations

1. The Exodus of Large Firms

Jersey City appears to be losing its larger firms. In the 10-year period ending in October, 1964, for example, fifty-seven firms moved to Jersey City (with approximately 7,700 employees) or an average size of 135 employees while in the eight-year period 1956-1964 nineteen firms with over 100 employees alone - left the city (on an adjusted basis this is comparable to twenty-four firms in ten years). Indeed between 1955 and 1966 there was a net loss of thirteen firms with over 100 employees. That is to say, at the beginning of this period there were sixty such concerns, thirty of them left and they were replaced by sixteen new such firms to leave the present number of about forty-six. Stemming this type of exodus is one of the primary problems facing Jersey City because it takes a large number of establishments to replace a P. Lorillard Company, an M.W. Kellogg or a Swift and Company.

The preponderant reason these larger firms leave Jersey City is their need for enlarged space. Although they may not be enraptured with the tax rate or labor conditions, our research has indicated that they are willing to trade off these inconveniences for the convenience of locating next to or in the center of their market. That is to say, the firms that operate in Jersey City are willing to pay the price of the obstacles mentioned in the preceding section for the privilege of prime locations. But when the need for more space becomes compelling and paramount, they are obliged to move and they invariably move to a site which offers them more space. That is, a place with relatively low land costs where they can construct a one-story plant with room for expansion and parking.

Indications we had during the personal interview suggest that this exodus might be continuing. At this writing the future of The Jersey City Printing Company, Arvey Corporation and Emerson Radio and Phonograph Corporation is by no means assured or secure insofar as their remaining in Jersey City is concerned. In order to stem this type of exodus, we feel that the city should follow the suggestions we have made regarding the new Economic Development Agency. This agency should develop

ongoing relationships or open channels to the business community. The lack of communication between municipal officials and the business leaders is the largest deterrent to successful relationships between the city and the business community and every effort should be made to open up avenues of communication between these two elements. When such means are established it will be possible to arrive at solutions to mutual problems before they become precipitous.

2. The Spread of Industrial Blight

As originally conceived, it was thought that primary industrial renewal attention should be given to nine areas. The returns to our questionnaire indicated that only 40 percent of the respondents were situated within these areas. Expressing this fact slightly differently 60 percent of the industries in Jersey City are not located within major industrial districts. Instead they are scattered around the city and are to be found in residential districts. In order to place this in perspective we list in Table 18 below the areal distribution of trucking companies, warehouses and industries as noted on the Division of Planning's 1963 map, "Areas of Industrial and Related Activity". This table shows that one-third of the trucking companies, more than one-quarter of the warehouses, and 85 percent of the industries are not contained within the nine industrial districts.

Table 18

Percentage Distribution of Industrial Activity by Industrial Districts

<u>Industrial District</u>	<u>Trucking Companies</u>	<u>Warehouses</u>	<u>Industries</u>
1	2	4	-
2	3	22	-
3	17	33	3
4	6	4	10
5	-	-	-
6	3	-	-
7	22	-	-
8	9	4	2
9	4	7	-
Not in Ind. Dist.	<u>34</u>	<u>26</u>	<u>85</u>
Total	100	100	100
Base	99	27	103

Source: Jersey City Division of Planning: "Areas of Industrial and Related Activity".

This table suggests that the spread of industry throughout Jersey City is pervasive. In our survey, for example, a number of our industrial respondents pointed to themselves as a major motivator of blight in residential neighborhoods. This points strongly to the conclusion that rather than give attention to any one district in the Community Renewal Program, attention with respect to arresting industrial blight should not be localized but rather should be given to the city as a whole.

It is regrettable that under the laws of the State of New Jersey it is not possible to eliminate through amortization non-conforming uses. We suggest that consideration be given to the enactment of such a law. If this transpires, it would then be possible to examine the zoning ordinance and land use maps to see where non-conforming uses were present and to provide for their elimination in concert with the development of land elsewhere in Jersey City for industrial purposes to house these transplanted firms.

The objective of this action would be not only to restrict the growth of manufacturing plants, warehouses, and trucking centers throughout the city, but to contain such activities in a number of easily recognizable industrial areas. These industrial areas would not contain public housing (as Industrial District 3 does now) nor other forms of residences. Although there are those who maintain that industry and residence mix, we do not believe such can be the case in Jersey City. Early and serious consideration in the Community Renewal Program should be given to the development of new industrial areas and to placement in these areas of manufacturing establishments which are currently blighting residential neighborhoods.

3. Community Attitudes and Organizations

There is increasing evidence that a city's ability to undergo economic growth and change depends not only on the character of its physical resources, and its stock of private and public capital, but also on its organizational resources, and on the degree of cooperation among the groups in the community. In some respects, the prevalence of unfavorable attitudes about Jersey City is one of the most important obstacles holding back economic expansion in the community.✓

The personal interviews we conducted, for example, elicited the fact that the business community either distrusts, mistrusts, and/or is suspicious of county and municipal governments, or that they feel apathetic in their relationships with the local government. There is latent hostility towards the city administration in some cases and an attitude of noblesse oblige in other instances. In many cases we didn't find too much pride in doing business in Jersey City, in owning property in Jersey City, or in having a product that was made in Jersey City.

In order that businessmen acquire confidence in and respect for municipal government in Jersey City it is imperative that all aspects of their distrust be eradicated. One way that this might be accomplished is to bring businessmen into the city government and the planning processes. A vehicle for this may be to involve the business community in the municipal government by establishing a businessman's Advisory Committee to the aforementioned Economic Development Agency.

Our interviews also unearthed the fact that the prevailing business leadership lived outside of Jersey City. The civic allegiance these men have is primarily to their home communities since this is where they pay their taxes and this is where their children go to school. Yet they frequently spend more of their active hours in Jersey City than in these communities. Although they spend up to two hours daily travelling between home and work, they do not have many choices insofar as finding a suitable residence in Jersey City is concerned. We, therefore, suggest that when suitable residences in suitable neighborhoods are offered such as is contemplated in the redevelopment of the waterfront - on a par with that which is to be found in the so-called suburban bedroom towns - these individuals will come back to Jersey City bringing with them a civic dedication and interest which is now lamentably not present. It is therefore in the city's best interest to provide an opportunity for developers to build such a neighborhood in which the business leadership might reside and in this manner the trend toward absentee management might be reversed.

4. Leading From Strength

If Jersey City is to recapture its rightful share of the region's industry, it must capitalize on its natural advantages. That is it must make the most of its unique location. We have selected, in Table 8, 47 industries for which proximity to the market place is a prime locational consideration. These industries should become targets for promotional campaigns. It is possible to acquire a

list of firms, their leading officers and their addresses and promotional pieces should be directed to them. In addition to such a campaign, vacant land should be acquired along the waterfront as we have indicated above so that there might always be a stock of usable industrial land. Although some of the railroad yards would make suitable locations for residential development - and indeed we have recommended such development above - this should not occur everywhere and indiscriminately.

Some industrial land belongs on the North River, and Upper New York Bay, particularly in the Point Breeze, Greenville, Claremont and Caven Point areas as well as near the existing Liberty Industrial Park.

Jersey City should also take active steps to improve the climate for business. Moreover, since Jersey City industrialists are so dependent upon truck transportation, there is little reason why they cannot receive better snow removal service. It is conceivable that the snow plows could clear the streets in the industrial areas before going to the residential neighborhoods. Better sewage and drainage facilities in industrial areas should receive more attention in the next capital budget and a general clean-up campaign would be especially welcomed.

It is probably not necessary to dwell on the tax picture at this point. Every effort should be made to either reduce it or at least inform the business community of its actual level. Finally, the rehabilitation and rebuilding of the industrial districts should only be limited by the funds which are put at the disposal of the city of Jersey City. It would seem that the end to industrial renewal in Jersey City is not now in sight and is indeed a continuing process.

Appendix I

SELECTED TOOLS FOR INDUSTRIAL DEVELOPMENT IN CITIES

In this Appendix and the succeeding one we review some of the salient characteristics of an Industrial Development Program. In most cases they are applicable in Jersey City and should be used in conjunction with the reactivated Industrial Development Commission that we have recommended. Most of the incentive programs reviewed, however, emanate at the state level and require special enabling legislation. It is also interesting that the most widely recognized need for assistance to industry is in the area of finance; hence most of the programs in existence today are primarily aimed at providing loans at lower-than-commercially available rates to firms that are considered to be marginal risks by the customary sources of financing. Except for the PIDC, described on the last page of Appendix II, most existing programs have not been established to meet the specific requirements of industry in the central cities.

The Need for an Industrial Development Program

The economic well-being of Jersey City depends, in part, upon the city's ability to meet the competitive efforts of other governmental bodies which are striving to influence the locational decisions of industry, and also upon the city's ability to adapt itself to a continually changing technology. Automation and other technological innovations require the replacement of prevailing production processes and the demand for new products renders obsolete the plant and equipment used to manufacture discarded product lines. To meet new conditions, many firms find that they can no longer operate in a city with outmoded industrial structures and a lack of suitable sites for new facilities. Thus, it is becoming increasingly important for Jersey City to take adequate protective measures if it is to retain manufacturing as part of a sound economic base.

The Financing Problem

Financing is basic to any industrial development program. The financing problem stems from the size and characteristics of the typical borrowing firms and the purpose of the loan. The larger the company, the less difficulty will it usually have in obtaining long-term financing and equity capital. In addition to the size factor, a nationally rated concern is usually able to borrow at a lower interest rate than a locally rated concern.¹ A recent Federal Reserve Bank survey also found that an awareness of the financing difficulties likely to be encountered by small businesses resulted in their making no effort to secure external financing.² Lack of financing was responsible for a reduction in working capital or the cancellation of plans for the expansion or replacement of plant and other fixed assets. The lack of small and medium-sized firms' borrowing ability for expansion is compounded by their shortage of adequate retained earnings or pension reserves.

With regard to the availability of mortgage money, a questionnaire administered in 1963 by the National Association of Real Estate Boards indicated that fewer than 50% of the industrial and warehousing respondents with local credit leases found the supply of such money to be ample. According to the Temporary Commission on Economic Expansion of New York

¹ National Association of Real Estate Boards, The Mortgage Market, Autumn 1963.

² "Small Business Financing: Corporate Manufacturers," Federal Reserve Bulletin, January 1961, p. 8.

State,³

"At today's cost levels, building or modernizing a plant requires a substantial investment not only in mortgage funds but of scarcer equity capital. Because of the risk of technological obsolescence, mortgage terms for industrial real estate are usually more restrictive than for houses, apartments, or even office buildings and shopping centers. Loan-to-value ratios of more than 65 percent are fairly unusual, being generally available only to prime corporations. Typically, a 50 percent first mortgage will be as high as an institutional lender will care to go. Similarly, amortization terms tend to be more severe, and interest rates higher than is customary with loans on other types of real estate."

The reason for relying on the credit rating of the firm as the basis for repayment of a loan, rather than on the value of the building as security, is the difficulty which is often encountered by the lender in finding occupants for facilities built to another occupant's specifications.

In view of the preference of private lending institutions for financing housing, shopping centers, and office buildings rather than industrial facilities which entail a greater risk, there is a need for public assistance to facilitate industrial construction.

The State Authority

In response to the demand for public assistance, a relatively new concept, the State Development Authority, was initiated by New Hampshire in 1955. As contrasted with the development corporation which function

³ Steps Toward Economic Expansion in New York State, December 21, 1960, pp. 57-8.

with private funds, the state authority is authorized by the legislature to use public funds. These funds may come from the sale of bonds or through appropriations. The state's assistance may take various forms, e.g. the development of sites and construction of buildings for sale or lease to industry, and loans to industry to match local and commercial funds in a proportion prescribed by law.

The experience of state authorities has been favorable, on the whole. Loss ratios have been low. According to a Federal Reserve Bank of Boston survey (1963), 40 percent of the dollar amount of loans went to new firms, 36 percent to established firms, for expansion, and 24 percent to firms relocated from another state.

Mortgage Guarantees

The success of FHA mortgage insurance in making private funds available for residential construction has led a number of states to devise similar tools for industrial mortgaging. The guarantee of mortgages lessens the risk and thus encourages conventional financing sources to issue higher loan-to-value mortgages. This program does not require the expenditure of government funds.

A factor of great importance in a mortgage insurance program is the lifting of limits imposed upon various financial institutions in making industrial loans if the loan is guaranteed by a state agency backed by the state's faith and credit.

A Federal Reserve Bank of Boston survey (1963) of the mortgage guarantee experience in five northeastern states shows that firms with less than 200 employees had 85 percent of the insured loans (73 percent in dollar amount of loan terms). The high percentage of guaranteed loans made to small firms may be due to their difficulty in obtaining conventional financing. More than 70 percent of the insured loans (in dollar terms) went to already established firms and 28 percent to firms relocating from out-of-state. No

losses have been incurred to date under these mortgage guarantee programs.

Development Credit Corporations

The legal basis for the development credit corporation is state legislation which establishes a quasi-public type of organization to use private funds for industrial development. The source of loanable funds is the sale of capital stock to groups more interested in economic growth than in the return on investment. The development corporation is then authorized to borrow from lending institutions up to some multiple of the issued stock and surplus. In 1961, the regulations governing the investment policies of Federally chartered savings and loan associations were altered to permit loans to be made to development credit corporations.

The rates at which development credit corporations borrow are $\frac{1}{2}$ to $\frac{1}{2}$ percent higher than the prime rate, and loans are then made at an interest rate of about 6.5 percent. The ratio of losses to outstanding loans has averaged almost 10 times the rate for commercial bank loans to business.⁴ However, since loans are made only to applicants rejected by conventional sources, the higher loss ratio is not surprising.

By increasing the supply of loanable funds under the provisions of Section 502 of the Small Business Investment Act of 1958, the usefulness of state and local development credit corporations is considerably enhanced. The SBA is empowered to make loans to state and local development companies which may be either profit or non-profit and whose principal purpose is the advancement of the local economy. A state development

⁴E.C. Gooding, "New War Between the States," New England Business Review, October 1963, pp. 3-4.

company (under the Act of 1958) is defined as a corporation organized by special legislative act to operate on a state-wide basis and with its membership limited to state residents or lending institutions of the state. A local development company is defined as one organized under applicable state corporation law to operate in a specific area. The SBA requires ownership and control of the local development company to be vested in individuals residing or doing business in that area so that the organization will be a community undertaking. Local or area ownership or control must be at least 75 percent of the total. No more than 25 percent of the ownership or control may be held by those who have a pecuniary interest in the project to be developed or by the holder of any interest in the small business being assisted. The SBA definition of a small business is so liberal that 95 percent of the country's firms qualify under the Act.

These loans may be used to finance the construction, modernization or conversion of plants, including the purchase of land, machinery or equipment. They may not be used for working capital or for debt repayment except for debt related to construction of the project involved. A qualified small business firm can borrow up to \$350,000 through a development company which must supply at least 20 percent of the firm's requirements. Proof must be provided that private financing at reasonable rates was unavailable. Loans from banks and other lending institutions are in addition to the amounts loaned by the SBA. SBA financing can be used for projects such as industrial parks where both large and small businesses have space, but SBA funds can only be used for space occupied by small business.

Repayment can extend up to 25 years plus 10 years beyond the usual maturity if necessary for the orderly liquidation of the loan. The interest rate is 5½ percent per annum, and if a participating lending institution charges a lower interest rate for its share of the loan, SBA will reduce its rate to 5 percent. In areas of substantial unemployment, the interest rate can be lowered to 4 percent.

The 5½ percent interest rate may not be too low after the development company adds its costs, possibly another 1 percent, to the loan. The development company is entitled to a return sufficient to cover taxes, maintenance charges, administrative costs and a contingency reserve, and to recover the development company's own capital and expenditures with a reasonable return. The proper allocation of these costs to small business where the development company also has loans to large business may be difficult; thus, the organization of a development corporation loaning only to small business might be feasible.

A development credit corporation, using the relevant provisions of the Small Business Investment Act of 1958, might be able to establish cooperatives of small business firms to construct in-town industrial parks or other facilities. A device which merits serious consideration outside of the housing field is the organization of a condominium. A condominium would be even more suitable for a multiple-user industrial structure than for an apartment building: this legal form of ownership could enable the industrial occupants of a building to bear the financial burden of their specialized facility and service needs individually, rather than equally, as they would as members of a cooperative.

A local development corporation is likely to be more useful to a city than a similar state organization because local banks and other financing institutions are more prone to invest in and disseminate information about a local organization whose benefits to the community are more apparent. The city also gains from the establishment of a development corporation because it entails the involvement of the major business firms in the economic problems of the municipality and because it opens a channel through which potentially qualified borrowers are informed about the financial assistance obtainable from private sources other than the commercial banks.

APPENDIX II

CURRENT PRACTICES IN STATE AND LOCAL INDUSTRIAL DEVELOPMENT PROGRAMS

This appendix includes the most significant features of current programs used by state and local public or private organizations to induce industrial growth. Most of these programs involve some form of government subsidy for new, expanding, or relocating industrial firms. In some cases, subsidies can be easily identified, such as property tax exemptions or the writedown of land costs. In other cases, however, subsidies are hidden, as in the case of state guaranteed loans providing funds at lower-than-normal interest rates. Generally, the programs require careful scrutiny to determine precisely what is being offered and at what cost to whom. Some of the programs are tailored for specific situations and would not meet development requirements of other than a limited number of localities. Basically, no single program or combination of programs will guarantee fruitful development. In our experience, the most successful development programs have been built on a high degree of cooperation among government officials and private citizens--an obvious point, but one often overlooked in efforts to formulate industrial development programs.

STATE PROGRAMS TO ENCOURAGE INDUSTRIAL GROWTH

Industrial Credit Corporations

Many states recognize the need for non-public credit corporations to help manufacturers obtain financing from other than normal channels. At present, 31 states have private, statewide development-credit corporations.

Such corporations are chartered by special legislative acts. Although these corporations are non-profit and quasi-public, they are organized and structured as profit-making corporations. Capital stock is sold, mainly to financial institutions and individuals, but any profits are allocated to reserves for bad debts. Member financial corporations also pledge lines of credit at low rates. The legally imposed ratio of borrowings to capital averages about 10:1. In 1959, stockholders averaged 325 per corporation (though some corporations had more than 1000) and outstanding stock averaged \$325,000.

Borrowers from these credit corporations are firms which certify that they are unable to get conventional (usually bank) credit for the loan requested (although not necessarily other loans). Borrowing companies typically are:

- Profitable, expanding, or have good prospects;
- New concerns about to move into a community; or
- Marginal firms that require strengthening to continue operations.

Firms need not meet bank standards in earning ability, capital or collateral borrowing; they must, however, meet bank standards for reputation and character. First mortgages of 80% or 90% of market value and second mortgages, legally prohibited from national banks, are fairly extensive, suggesting that most borrowers are undercapitalized. Most loans are made to larger small businesses, most of which are manufacturers.

Credit corporations do not attempt to compete with conventional lenders. Typically, they have small staffs and rely on member organizations for help and credit analysis of "special situation" loans. These credit corporations are free to select the firms to be financed and to negotiate the terms of financing, including the type of financing needed, the security instruments to be used, the interest rates to be charged, and the supervision to be provided.

State development corporations have found it hard to sell stock, especially in non-distressed areas. Some of these corporations are financed solely from private sources; others have initial state aid. For example, the General Assembly of Virginia appropriated \$50,000 to the Virginia Department of Conservation and Economic Development to start a credit corporation. The Arkansas legislation authorizing formation of the Development Credit Finance Corporation allows the State Board of Finance to purchase bonds of the Corporation. The Corporation has the power to buy and sell property, make loans, and buy and sell bonds or capital stock of corporations. It cannot, however, lend money when credit is available elsewhere.

In an attempt to foster the "home-grown" industries, the Kentucky General Assembly, in 1960, enacted legislation authorizing 25 or more persons to organize a business development corporation. The purpose of such a corporation is to provide private funds for growth loans to industry and business in instances where financing cannot be obtained through normal financial channels.

Industrial Development Authorities

A state industrial development authority is an arm of state government and is a state-supported industrial financing authority. It is organized to foster the industrial development of the state and has at its disposal funds that originate, at least in part, from public sources. There are two major types of such authorities, an industrial park authority and a building authority (Tables A-1 and A-2).

New Hampshire's Industrial Park Authority (1955) was the first to be chartered. It is authorized to buy and sell industrial sites, to establish planned industrial parks through the improvement of sites, and to construct industrial plants for sale or lease to private firms. The purpose is to furnish short-term funds for real estate improvement and construction of industrial plants. These funds are to be repaid with interest by manufacturers who purchase sites and buildings. The Authority may borrow from the state treasury and may issue bonds payable solely from the income of the industrial parks created under the authority of the Act. The full faith and credit of the state can be pledged.

In Pennsylvania, special financing assistance is available through the Pennsylvania Industrial Development Authority (PIDA), which uses funds made available by the state legislature. The Authority makes loans at low interest rates to local development corporations in areas of chronic unemployment. A community can provide 100% building financing to a corporation by providing 20% of the cost through community funds (pledges), 50% through private financial institutions, and 30% from PIDA. To obtain PIDA help, a community must have a firm commitment for other financing and plant occupancy; the plant location must not represent an intra-Pennsylvania move; and state credit may not be pledged. PIDA loans average 20-year terms; repayment may be postponed until after retirement of the first mortgage. Rates are set to create an inducement to industry. By May 31, 1959, PIDA had made 85 loans and commitments amounting to over \$10 million. Community corporations, banks, insurance companies, and, in one instance, the Small Business Administration, had invested over \$20 million in the same projects. By the end of 1962, the PIDA had appropriated \$36 million.

The New York Job Development Authority (JDA), established in 1961, is similar in many respects to the Pennsylvania program. Local non-profit development corporations in New York are eligible for JDA loans for up to 30% of the cost of an industrial project, the balance to be raised by the local corporation. JDA has both a special purpose and a general purpose fund, with \$50 million authorized for each fund. Loans are issued on the basis of 30 year bonds and 5 year notes. The principal difference between the two funds is that special

TABLE A-1

STATE FINANCING OF INDUSTRIAL DEVELOPMENT
AS OF JANUARY 1, 1963

<u>State</u>	<u>Year</u>	<u>Type of Program</u>
Maine	1957	LG
Vermont	1961	LG
New Hampshire	1955	SBLG
Rhode Island	1958	LG
Connecticut	1961	LG
New York	1962	L - inactive
Pennsylvania	1956	L
Delaware	1961	LG
West Virginia	1961	L
Kentucky	1958	L
Oklahoma	1960	L
Georgia	1960	L - inactive
Alaska	1961	L - inactive

LG - Loan Guarantee
L - Loans
SBLG - Development of sites, buildings and loan
 guarantees

Source: The Advisory Committee on Intergovernmental
Relations, "Industrial Development Bond Financing,"
June 1963.

TABLE A-2

VOLUME OF AUTHORIZATION THROUGH 1962
(millions of dollars)

<u>Debt Authorized</u>		<u>Funds Appropriated</u>		<u>Guarantee Limit</u>	
Alabama	18	Kentucky	2	Connecticut	25
Delaware	10	Pennsylvania	36	Maine	20
Oklahoma	10	West Virginia	2	New Hampshire	5
New Hampshire	4			Rhode Island	30
New York	<u>100</u>		<u> </u>	Vermont	<u>10</u>
	142		40		90
				Grand Total	272

Source: The Advisory Commission on Intergovernmental Relations,
"Industrial Development Bond Financing," June 1963.

Bond Issues

The use of general obligation or revenue bonds to support industrial development is widespread, particularly in the southern states. Through 1962, an estimated \$461 million of such bonds had been issued by agencies authorized (Table A-3). One reason for the success of this type of financing has been that since the bonds are tax exempt, low interest rates are possible. Twenty-eight states have some type of bonding law to assist communities in their industrial development programs, although only 17 states have active programs.

The oldest program of bond assistance to industry is Mississippi's Balance Agriculture with Industry (BAWI) program (Table A-4). The program makes it possible for a community to issue municipal bonds, with the full faith and credit of the municipality, for the purpose of buying land and erecting a building for industry. The property so acquired or constructed is tax exempt. The purpose of the bonds must be approved by the Agricultural and Industrial Board, the voters must approve the bonds, and the total value of the bonds outstanding at any time cannot exceed 20% of the community's real property assessment. Bond issues through 1962 totaled \$102,748,000 (Table A-5). During the 1940-1961 period, manufacturing employment in Mississippi grew from 58,600 to 121,900.

Two other types of bond issues have recently been adopted in Mississippi. Industrial Revenue Bonds enable a manufacturer to purchase equipment. In this case, the manufacturer must have the bonds underwritten. No election is required to approve the issuance of such bonds, unless 20% of the electorate object by means of petition. The value of this type of bond program is as yet unknown; it is relatively untried because of its newness, and the A & I Board has not yet resolved several administrative questions.

A community may issue full-faith-and-credit bonds to develop an industrial park with proceeds from the sale of developed land used to repay the bonds. The issuance of such bonds is subject to the approval of the A & I Board. The A & I Board can pay up to one-fourth of the cost of engineering studies (total share of the A & I Board not to exceed \$2000) to determine the practicality of developing a park.

In 1953, Louisiana amended its constitution to enable communities to finance industrial development projects. Under the Louisiana Industry Inducement Law, any political subdivision may enter into a contract to construct a plant for a new manufacturer. The cost is borne by local general-obligation bonds, and the total amount outstanding cannot exceed 20% of the total assessment of the community. The State Bond and Tax Board and the Board of Commerce and Industry must certify approval of any proposed contracts between a community and an industrial enterprise. A total of 19 plants have used the provisions of this program. Total bonds issued under this program through 1962 totaled \$12,630,000.

TABLE A-3

VOLUME OF LOCAL INDUSTRIAL DEVELOPMENT BONDS
ISSUED BY END OF 1962

<u>Year</u>	<u>Amount (\$M)</u>
Amount before 1951	7, 248
1951	9, 615
1952	7, 605
1953	5, 270
1954	5, 015
1955	7, 280
1956	8, 231
1957	19, 841
1958	17, 495
1959	45, 536
1960	103, 023
1961	83, 459
1962	87, 840
Date uncertain	<u>33, 598</u>
TOTAL	441, 056
Estimate for underreporting	<u>20, 000</u>
GRAND TOTAL	461, 056

Source: The Advisory Commission on Intergovernmental Relations, "Industrial Development Bond Financing," June 1963.

TABLE A-4

LOCAL INDUSTRIAL BOND FINANCING

<u>State</u>	<u>Year of Legislation</u>	<u>State</u>	<u>Year of Legislation</u>
Mississippi	1936	Arkansas	1958
Kentucky	1948	Alabama	1959
Alabama	1949	Georgia	1960
Illinois	1951	Maryland	1960
Tennessee	1951	Missouri	1960
Louisiana	1953	Kansas	1961
Colorado	1955	Minnesota	1961
New Mexico	1955	Nebraska	1961
North Dakota	1955	Oklahoma	1961
Vermont	1955	Maine	1962
Washington	1955	Virginia	1962
Wisconsin	1957		

Source: The Advisory Commission on Intergovernmental Relations,
"Industrial Development Bond Financing," June 1963.

TABLE A-5

VOLUME OF LOCAL INDUSTRIAL DEVELOPMENT BONDS
ISSUED BY STATES THROUGH 1962

<u>State</u>	<u>Amount (\$M)</u>
Alabama	73, 052
Arkansas	48, 461
Georgia	2, 198
Kansas	3, 311
Kentucky	42, 239
Lousiana	12, 630
Maryland	100
Mississippi	102, 748
Missouri	425
Nebraska	3, 225
New Mexico	7, 300
North Carolina	501
North Dakota	2, 650
Oklahoma	500
Tennessee	125, 716
Washington (Estimate)	<u>16, 000</u>
TOTAL	441, 056
Estimate for underreporting	<u>20, 000</u>
GRAND TOTAL	461, 056

Source: The Advisory Commission on Intergovernmental Relations,
"Industrial Development Bond Financing," June 1963.

(While Louisiana has amended its program and Georgia may ultimately do so, a recent ruling of the Florida Supreme Court has abolished the use of County Development Authorities for financing industrial development.)

Alabama has two municipal bonding laws, the Cater Act and the Wallace Act, that permit a municipality to issue revenue bonds to construct and equip industrial plants.

The Arkansas legislature, in 1958, authorized municipalities and counties to issue revenue bonds for industrial development purposes. In Colorado, municipalities can issue anticipation warrants for the construction of buildings and the purchase of equipment for "public projects." "Public projects" include manufacturing facilities.

Although Georgia's state constitution does not permit issuance of revenue bonds on a state-wide basis, approximately 25 of the state's counties have passed local constitutional amendments that permit financing of industrial development through revenue bonds. This type of financing is different from that of most states, in that it is on a county, rather than municipal, level.

Maryland counties may, as of 1960, issue general-obligation bonds or certificates of indebtedness, known as Industrial Development Bonds, if there is severe unemployment within a county. Money so obtained is made available to county industrial development corporations, and the bonds, or certificates, pledge the full faith and credit of the taxing unit.

New Mexico's bond authorization represents an extreme case. Under that state's legislation, a municipality is authorized by ordinance to issue revenue bonds to buy all of the assets of a company, including land, building and equipment, inventory, cash, good will, etc., and to move all of the movable property to or near the municipality, provided that the property is leased to a privately operated company subject to rental payments adequate to amortize the bonds.

As a final point on industrial development bond financing, it is worth noting that the Advisory Commission on Intergovernmental Relations has recently taken a hard look at various local programs with an eye toward the need for legislation to correct what may believe to be serious tax inequalities. Although the present level of industrial development bond financing is a small percentage of the total outlay of municipal bonds, the Commission anticipates an ever increasing percentage of tax-exempt bonds for industrial financing. As a consequence of the growing importance of these programs, there is an increasing

body of opposition. The Commission holds the opinion that if present trends continue, the programs will eventually result in self-defeating competition among the states, with the concomitant effect of dissipating development resources and activities. Moreover, there is the additional problem of the equity of private industry's exemption from Federal income taxes. In some cases, for example, it has been possible for an industry to actually show a profit on its use of land and equipment financed by municipal bonds.

Thus, in considering the merits of the various inducement programs, the very real possibility of Federal regulation of industrial development bond financing should be kept in mind.

Tax Exemptions

Fewer states authorize communities to offer tax exemptions. (See Table 1.) Alabama, Mississippi, and Louisiana permit exemption of new manufacturing establishments of special types for a 10-year period. Arkansas permits manufacturers to be exempted for seven years by vote of local electors. Oklahoma, South Carolina, and Kentucky limit exemptions to five years.

Tax exemptions appear to be losing force as an inducement to industrial development. For one reason, they raise the question of who must make up for this exemption or what services will not be provided. For another, property taxes are a relatively small percentage of a manufacturer's total operating costs.

In spite of the fact that few states officially offer such exemptions, many communities are extremely flexible in their assessment practices. In some localities, assessment equivalent to 15% of fair market value is the practice.

LOCAL DEVELOPMENT CORPORATIONS

At the local level, there have been established in many communities privately supported community development corporations to provide funds and sometimes other types of assistance to manufacturers. The capital to support these corporations usually comes from individuals and business concerns in the community either by the issuance of stocks, bonds, or notes, or in the form of donations. The capital of such a corporation is venture capital and is most commonly used to buy or construct industrial buildings for manufacturers. The main aim of such a corporation is to attract or encourage the growth of industry as a means of providing jobs for local residents. Some of these corporations are non-profit in nature while others have a profit motivation.

Some of these community corporations are quasi-public in nature since their major purpose is to stimulate local economic growth and since in most cases they work very closely with the local government agency. Some municipal governments which have appropriated small sums for industrial development promotion have turned these funds over to community development corporations to use according to their best judgment.

In many states community development corporations have been the instruments through which the state has made available state funds to assist communities to obtain new employment. It is the general practice that the state financing authority, whether it be Pennsylvania, New York, or other states, loans the money directly to the local development corporation rather than to the industry which is slated to come into the area. When 100% financing is talked about, for example, most plans call for an equity input by a community development corporation with a state sponsored loan to the community development corporation which, in turn, builds suitable space for the industry in question. It is quite common for such local development organizations to re-invest any profits or any new funds in new projects.

In New York City, the New York City Industrial Development Corporation has been formed to take advantage of Job Development Authority loans. While the directors of this corporation are public officials, the corporation can be classed as a community development corporation of a quasi-public nature.

QUASI-PUBLIC DEVELOPMENT CORPORATIONS--THE PIDC: AN INNOVATION FOR URBAN INDUSTRIAL DEVELOPMENT

In recent years, there has been growing interest in the use of public or quasi-public development corporations in which local government has an active interest. One of the most notable of these corporations is the Philadelphia Industrial Development Corporation, or PIDC, which is classed as a quasi-public non-profit corporation. This corporation, organized in 1958, is jointly sponsored by the City of Philadelphia and the Chamber of Commerce of Greater Philadelphia. On the board of directors, there is representation by the business community, by key city officials, and by public officials who are jointly selected by the Chamber and by the City through its director of commerce.

The PIDC, by virtue of its quasi-public nature, is able to provide low-cost financing to provide space for industry wishing to locate or relocate in Philadelphia. For older structures, PIDC purchases the site, renovates the building, in accordance with the specifications of the firm to be accommodated, and then sells or leases the space at a low monthly rent. For companies who wish to expand, PIDC works with the Philadelphia Redevelopment Authority to acquire land in certified land redevelopment areas.

The City's power of eminent domain is utilized by the PIDC through the Redevelopment Authority of the City of Philadelphia. A land bank has been established which serves as a mechanism whereby the City is able to transfer to the Redevelopment Authority without compensation available city-owned property suitable for industrial development. Likewise, the Redevelopment Authority is authorized to convey to the PIDC designated properties carrying any deed restrictions considered necessary to assure property usage.

Of particular interest is the tax exempt status which is available under a Treasury ruling to holders of mortgage obligations. With this tax exemption and the low financing rate that is possible, PIDC offers to provide 100% financing of total project cost at rates which are below conventional rates. PIDC as a city instrumentality can borrow at rates from 3% up depending upon the transaction with rates usually running about 4%. Most of the transactions are installment sales to manufacturing companies and the cost to the company is determined by the terms of borrowing for PIDC.



Jersey City Chamber of Commerce

921 Bergen Avenue • Jersey City, New Jersey 07306

AREA CODE 201 — 653-7400

September 19, 1966

The Area Development Council of Jersey City and the Jersey City Chamber of Commerce are assisting Arthur D. Little, Inc. in conducting a survey of leading business establishments in Jersey City for the Community Renewal Program which is currently being undertaken by the Redevelopment Authority and the Division of Planning, Office of the Mayor, in Jersey City. The questionnaire is designed to furnish information in order that the City of Jersey City can plan for and accommodate its growth more adequately. You will find it enclosed with this letter.

We assure you that all replies to this questionnaire will be kept confidential. It is important to the success of the study that all questionnaires be answered and returned and therefore we have enclosed a pre-addressed and stamped envelope for your convenience. If you have any questions, please do not hesitate to call me. Thank you for your help on this survey.

Sincerely yours,

Walter E. Knight
Executive Vice President

WEK:vhs

Encl: Questionnaire
Return Envelope

JERSEY CITY PLANNING SURVEY

Please return to:
L. K. Loewenstein
Arthur D. Little, Inc.
630 Fifth Avenue
New York, N. Y. 10020

Name of Firm _____

Address _____

Name & Title of person filling out questionnaire _____

A. Questions about your operations:

1. If you were building a new plant today, would you select a site in Jersey City? YES _____ NO _____

Reasons: _____

2. For economical operation, are your present buildings:

Adequate _____ Obsolete _____

3. In what year or years were your present buildings constructed?

4. In what year was your firm established in Jersey City? _____

5. Do you find your plant operating costs increased by local street traffic congestion? YES _____ NO _____

6. What percentage of your raw material inputs comes to your facility by:

truck _____

railroad _____

other _____

total 100%

7. What percentage of your finished product leaves your facility by:

truck _____
railroad _____
other _____
total 100%

8. How many persons do you employ? Factory Workers _____
Office Staff _____
Total Employment _____

9. What percentage of your labor force is:

skilled _____
semi-skilled _____
unskilled _____
total 100%

10. Are there any types of skilled employees presently in short supply? If so, what are they? _____
11. Are there any types of unskilled employees presently in short supply? If so, what are they? _____
12. Are there any types of employees presently in over supply? If so, who are they? _____
13. What do you estimate to be your total employment?
in 1970 _____; in 1975 _____; in 1980 _____.
14. What is the size of your present building? _____ square feet.
15. What size building do you estimate you will require in 1970?
_____ sq. ft.; 1975 _____ sq. ft.; 1980 _____ sq. ft.
16. How much land area do you now occupy? _____ sq. ft.
17. How much land area do you estimate you will require in 1970?
_____ sq. ft.; in 1975 _____ sq. ft.; in 1980 _____ sq. ft.

B. Questions about locational trends:

1. Why did you locate your plant or operation in Jersey City?

2. Are you, on the whole, satisfied with your present location?

YES _____ NO _____

If no, indicate reasons in order of importance:

Inadequate skilled labor supply _____
Inadequate unskilled labor supply _____
Labor costs too high _____
Poor truck access _____
No railroad siding _____
Too far from raw material _____
Too far from market _____
Taxes too high _____
Obsolete building _____
Need more floor space _____
Other (specify) _____

3. The present site represents (check one)

Original location of firm _____
Relocation of firm from elsewhere _____
Original location of branch plant _____
Relocation of branch plant _____

4. The buildings now occupied by the firm are:

Owned by the firm (a) _____
Rented by the firm (b) _____

5. Do you have adequate:

Off-street parking spaces _____
Off-street loading area _____

6. If you relocated within the last 15 years, what was the address of your former plant? _____

7. Why did you leave your old location? (indicate order of importance)

Inadequate skilled labor supply _____
Inadequate unskilled labor supply _____
Labor costs too high _____
Poor truck access _____
No railroad siding _____
Too far from raw material _____
Too far from market _____
Taxes too high _____
Obsolete building _____

8. Have you expanded or contracted your Jersey City operations in the past 5 years?_____

If yes, by how many square feet of building area_____

If yes, by how many square feet of land area_____

9. Do you think you will expand or contract your Jersey City operations in the next 5 to 10 years? Expand_____Contract_____
10. What do you think the probability of such an action is_____%
11. Would you rebuild or expand on the same site in Jersey City if your site requirements could be met? YES_____ NO_____
12. If not, why not?_____
13. If you are planning to expand in Jersey City, do you intend to rent or to purchase new space?_____
14. (Optional) If renting, how much per square foot would you be willing to pay? \$_____.
- If purchasing, how much per square foot would you be willing to pay? \$_____.
15. If you are planning to expand in Jersey City, will the new space be in:
- (a) an existing building _____
- (b) a newly-erected building_____

C. You and the City

1. Do you consider Jersey City more favorable than other locations with respect to:

	Jersey City more favorable	Jersey City less favorable	Jersey City equal
a) labor costs	_____	_____	_____
b) labor conditions	_____	_____	_____
c) real estate taxes	_____	_____	_____
d) inventory taxes	_____	_____	_____
e) machinery and equipment taxes	_____	_____	_____
f) closeness to market	_____	_____	_____
g) closeness to raw materials	_____	_____	_____
h) municipal attitudes	_____	_____	_____
i) rents or cost of space	_____	_____	_____
j) other (specify)	_____	_____	_____

2. Which of the following do you usually purchase in Jersey City:

How much (%)

- a) raw material inputs in your products _____
- b) banking services _____
- c) legal services _____
- d) accounting services _____
- e) office supplies _____

3. What percentage of your raw material inputs is produced in Jersey City? _____

4. What percentage of your finished produces is shipped to other producers or manufacturers who are also located in Jersey City? _____

5. What percentage of your manufactured goods is shipped to wholesalers or retailers who are also located in Jersey City? _____

6. How may the neighborhood surrounding your plant be improved so that it might be a more desirable place to conduct a business? _____

7. What City services need improvement? _____

8. What City services or policies are you particularly happy about? _____

9. What can the City of Jersey City do to make your life more pleasant and bring desirable industry to Jersey City? (This answer may be general or specific; i.e., lower taxes, improve access to Journal Square, train workers, or widen "X" street.)

Please put this questionnaire in the accompanying envelope and mail it to: Dr. Louis K. Loewenstein, c/o Arthur D. Little, Inc., 630 Fifth Avenue, New York, N.Y. 10020. Thank you.

JERSEY CITY INDUSTRIAL REALTORS SURVEY

Name of Firm _____

Address _____

Name and Title of Person Being Interviewed _____

1. What is the price of industrial land which is sewered and watered but does not have improvements (e.g. buildings) on it in Jersey City? Explain how this differs in various parts of Jersey City.

2. What is the price of industrial buildings per square foot in various parts of Jersey City?

3. What types of firms are seeking space in Jersey City?

4. Is there space available for such firms? Please comment here on the availability of space in terms of location, size, price, quality, modernness, etc.

5. What reasons are given to you for not locating in Jersey City by prospective firms?

6. Do these reasons differ by type of industry and if so, how?

7. Where did these firms who rejected Jersey City locate (if you know)?

8. What is the price for space which firms are willing to pay, and how does this differ by type of industry?

Interviewer:

Date:

LKL:NB
September 23, 1966

Appendix V

FACTORS OF OBSOLESCENCE OF INDUSTRIAL BUILDINGS AND SITES

A. Introduction

The following sets of criteria of obsolescence factors should be used to evaluate industrial buildings, industrial areas and, finally, waterfront areas since different criteria are applicable in each instance.

B. Industrial Buildings

1. Absence of off-street loading facilities (lacking docks and loading platforms).
2. High building to lot coverage.
3. Minimum lot size less than 100 ft. x 100 ft.
4. Loading facilities not at tail gate level.
5. Poor condition of walls (holes, paint peeling, chipped and/or missing masonry).
6. Poor condition of roof and foundation (sagging sides, warped and out of plumb).
7. Absence of fire exits and obstructed egress.
8. Unsightly facade.
9. Poor condition of windows (windows broken, casements or sashes rotting out, and panes of glass and painting required).
10. Building at many levels with additions tacked on to buildings and bridges between buildings.

C. Industrial Areas

1. Large amount of traffic congestion.
2. Presence of railroad beds in streets.
3. Obsolete size of blocks.
4. Inadequate or insufficient parking space.
5. Presence of mixed land uses.

6. Presence of non-conforming land uses.
7. An absence of connected sewers and water mains.
8. Sidewalks not in existence.
9. Platted streets not put in place.
10. Lots narrow, undersized, odd-shaped, and poorly parceled.
11. Alleys too narrow, obstructed, and not lit properly.
12. A large amount of vacant land (probably held for speculation or only used for temporary storage and parking).
13. An abundance of sheds.
14. Excessive building heights and building density.
15. Buildings placed on poor topography or built on steep slopes.
16. Built on marsh land or other inadequate soil.
17. Height and coverage of buildings.
18. Landscape.
19. Age of buildings.

D. Waterfront - including rail, shipping, piers and other facilities

1. Degree of activity, that is, number of forkloads in use and the amount of trucking facilities. Very little activity is indicative of obsolete conditions.
2. Condition of transit sheds (i.e., see criteria for industrial buildings).
3. Condition of pilings and presence of dry rot (wooden pilings per se are obsolete while concrete pilings are not).
4. Number and type of rail cars on sidings and spurs, and the date on which the rail cars arrived and were unloaded. (This is generally tagged on the door of the car.)

5. How vacant land is maintained. Is grass growing on vacant land?
6. How long has the land been vacant? Is there debris on vacant land?
7. Protective covering on piers, i.e., use of stainless steel and/or steel planking. This is highly desirable.
8. How many ships in slips or in berths? Is port active?
9. Presence of rusting rails. This is an indication of inactivity and deterioration.
10. Presence of grass on road bed of railroad.
11. Type of pier, i.e., single piers are generally obsolete.
12. Width of apron next to shed on pier -- aprons of less than 25 feet are apt to be obsolete, that is to say, the narrower the apron, the more obsolete it is apt to be.
13. The presence of access roads. If they exist, this is desirable.
14. Size of pier. (Generally, the larger, the better it is.)
15. How large are the cargo doors on warehouses? (Generally, cargo doors of less than 22 feet are obsolete).
16. How much modern lift equipment is used? Are quay lift cranes available?

Appendix VI

INDUSTRIAL BUILDING CONDITION SURVEY METHODOLOGY

A. Purpose

Jersey City is the fourth community for which Arthur D. Little, Inc. has conducted a survey to determine the condition of industrial structures and their facilities. The basic questionnaire format prepared for Philadelphia, with small improvements developed in the New Bedford, San Francisco and Jersey City surveys, has proved very effective in identifying deterioration and obsolescence in industrial areas and structures at a reasonable cost. This questionnaire is appended to this report.

Of course, a city will undertake more exhaustive examinations before requiring the clearance and rehabilitation of structures averaging \$100,000 in value; yet the cost of such engineering evaluations prohibits the surveying of more than small neighborhoods, let alone the majority of the industrial structures in a city. Thus the Arthur D. Little, Inc. questionnaire is designed to identify the needs of industrial areas for conservation, rehabilitation and redevelopment. Then:

1. policies can be formulated to realistically encourage private renewal, and
2. the municipality can begin to plan direct action in the situations where the survey shows that publicly sponsored rehabilitation and redevelopment is the only solution.

B. Survey Procedure

The actual inspection of buildings was performed by a crew of four college students, three from engineering schools and a supervisor, who also directed the field work in the large San Francisco study. Each survey averaged six buildings per eight hour day. Four days of orientation preceded the inspections and the re-examination at random of ten percent of the buildings by the field supervisor helped guarantee careful work.

In almost all cases, the surveyor was given immediate cooperation. Exceptions were usually in plants of large corporations where access to a person who felt he had the responsibility to authorize such an inspection was difficult to obtain. In each of these half-dozen cases, however, a call-back and fuller explanation by the supervisor was sufficient to elicit access for inspection.

C. Survey Forms

Copies of forms used in the survey are included in this report. The three-page form was used in the 256 buildings (or building complexes) surveyed extensively. The one page form permits a brief census of superficial information about buildings, not

sufficiently important to be included in the survey. The primary criterion for this distinction was size and the smallest buildings surveyed on the long form were usually at least 8,000 square feet in floor area. It may be seen that the categories on the shortest census form are also included in the larger form.

The following is a description in greater detail of the full form based on the instructions given to the surveyors.

(1-3)	File Number	Every block was assigned a number between one and one-hundred (1-2) unique in its area, and every lot within the block a number between one and ten (3).
(4-5)	Space Category	01 - Industrial building. 02 - Warehouse. 03 - Special Industrial building. (e.g. a refinery) 04 - Special warehouse. (e.g. cold storage) 05 - General purpose shed type. 11 - Truck lot 12 - General storage lot. (e.g. coal yard) 13 - Junk yard.
(6)	Number of Firms	The number of firms having operations located in the building.
(7-10)	Number of Employees	An estimate (rough if necessary) of the number of people working primarily on the premises.
(11-15)	Assessed Value Land	
(16-20)	Assessed Value Buildings	
(21-23)	Land Area - Total	The land area, not including sidewalk space of the property in thousands of square feet.
(24-26)	Building Floor Area	Measure by pacing the approximate floor area and write in the total for the whole building in thousands of square feet.
(27)	Condition	Circle the choice that best describes your initial impression of the building's appearance.

- (28) Basement Indicate if none. If there is one and it could be used for manufacturing or commercial, check "useable". If there is only a partial basement (e.g. for heating plant and/or limited storage), check "partial". If there is a basement, decide whether some factor makes it inadequate for manufacturing, storage, etc., (dirt floor, wet, low ceilings, no light or access, bad condition, etc.) and if so, check unuseable.
- (29) Number of Floors Fill in number of floors. Ground floor is the first floor. Be sure you refer to this particular building.
- Not Surveyed Check if for any reason the inspection could not be completed. If vacant, write the name of the firm previously located in the premises. In other cases explain fully.
- (30) Vacant Land Indicate the category for the correct percentage of land covered by buildings or used except for junk storage. Lawns or other landscaped area is considered to be used.
- (31) Land Utilization It was decided that this was superfluous and this column was used to indicate the area of the city.
- (32) Building Utilization Estimate percent of building floor area presently in use (i.e. not vacant). Storage is considered use, unless items stored are obviously trash or junk.
- (33) Appearance of Adjacent Structures The building on either side and perhaps the building across the street are to be considered, not the neighborhood as a whole. "Good" is circled if the adjacent buildings have a better appearance than the one being surveyed. "Fair" if the appearance is relatively the same, and "Poor" if their appearance detracts from the building under study. "None" if misplaced and should not be used.

- | | | |
|------|----------------------------------|--|
| (34) | Auto Parking Spaces | Write in the number of autos that can be parked on the premises or on other property owned by the firm less than one block away per 10,000 square feet of building floor area. |
| (35) | Off-Street Truck Loading Spaces | Write number of trucks and check the appropriate column. Trucks refer to trailer-trucks. An alley is considered "off-street" if it is not used by others for cars or trucks. |
| (36) | Per 1000 Square Feet Floor Space | Circle the IBM code number in the appropriate box. |
| (37) | Rail Siding Spaces | Fill in the number of railroad cars that could be held for loading adjacent to the building at one time. |
| (38) | Access from Street | Rate in terms of how easy it is to get into and out of building. Think of both people (entrances) and materials (trucks). If both on a main street, check "good". Place major emphasis on receiving and shipping (trucks). |
| (39) | Traffic Circulation | Are the streets adequate for the amount of traffic and the size of the vehicles? Is traffic impeded by truck unloading or by railroads or heavily traveled cross-streets? |
| (40) | Air Conditioning | Fair may be used to indicate that only a portion of the premises have air conditioning |
| (41) | Natural Light | Estimate the amount of sunlight available to working areas, especially from windows but also through skylights. |
| (42) | Age of Building | If the guide can give a good estimate, write it in and then circle the appropriate IBM coding. If guide is uninformed, make estimate of best category and circle. |

- | | | |
|------|----------------------------------|---|
| (43) | Type of Construction | 1,2 steel or reinforced concrete
3 limited concrete or heavy timber
frame (often a brick building) 4
shed type, 5 wood frame. |
| (44) | Condition of Outside
Wall | Rate in terms of obvious structural
conditions. "Poor" means conditions
that are an obvious threat to the
building's continued use if uncorrected.
Requires major repairs (e.g. missing
masonry, sagging, etc.). "Fair" means
could be used as is, but conditions that
should be corrected (e.g. pointing up
masonry, major painting, replacing
some siding or surface covering. "Good"
means defects no worse than occasional
peeling paint, etc. |
| (45) | Condition of Foundation | Same general definitions as Item (47) |
| (46) | Condition of Roof | Same as above. If roof cannot be seen,
check column 5. |
| (47) | First Floor Ceiling
Height | Write in approximate height. Where
variable, write range and circle
figure that mostly applies. Example: 10
to 20. Check column applying to circled
figure. |
| (48) | Loading | Write floor loading capacity (lbs/sq.ft)
if it can be obtained from responsible
party. Rate on basis of special instruc-
tions. Where variable, check column that
mostly applies. |
| (49) | First Floor Bay Area | Refers to the spacing between supporting
columns. Write in approximate distance and
check appropriate column. Example 12 ft x
16 ft. Write 12 x 16 and check column 8
(less than 196 square feet). |
| (50) | First Floor - Floor
Condition | Refers to the condition of the floor
itself. "Poor" means major faults that
are a problem in building use. Examples:
sagging, large holes, etc. "Fair" means
relatively minor damage to floor or
covering such as small holes or slightly
uneven; wooden floors are only fair. |

- | | | |
|---------|---------------------------------|---|
| (51) | First Floor - Wall Condition | Same definitions as in item (41). |
| (52) | First Floor - Ceiling Condition | "Poor" means large cracks in plaster, exposed lathe, and other defects. "Fair" refers to occasional "spot" damage. |
| (53) | First Floor - Windows Condition | "Poor" indicates broken windows, casements of sashes rotted out, and windows missing. "Fair" means a painting or minor repairs required, and relatively few sashes requiring replacement. |
| (54-61) | Upper Floors | Same characteristics and definitions as first floor above (Items 44-50). Use floor that is the worst of the upper floors, or conditions that are the most prevalent. |
| (62) | General Layout of Building | Rate building in terms of the ease and efficiency of laying out manufacturing operations. "Poor" to "Fair" would indicate varying degrees of any of the following conditions:

<ul style="list-style-type: none"> - expanse broken up by elevators, stairs, etc. - bearing wall limiting expanses - different levels of floors, ceilings - irregularly shaped or long and narrow. |
| (63) | Layout of Associated Buildings | Refers to the inter-relation between all the buildings on the property. "Poor" means many connections by ramps, bridges, tunnels, etc.; different floor levels, numerous additions tacked on here and there. In general, it indicates a poor flow of materials between buildings. If there is only one building on the property circle "5", not applicable. |
| (64) | Elevators - number | Write in the number and check appropriate column. This includes both passenger and freight elevators, but not "dumb-waiters". If a single-story building, check column "5", not applicable. |

- (65) Elevators - Access to Shipping
- Rate in terms of distance and ease of moving goods (by hand or truck) between receiving and shipping area and freight elevator(s). Conditions rating "Poor" would include:
- steps or ramps between elevator and shipping area
 - shipping area located in another building
 - long distance (150 ft.) between elevator and shipping area
 - necessity of traveling length of building (thru work areas) to reach one or the other.
- "Good" would indicate the elevator was adjacent to the shipping area, with little or no obstructions to either material handling or other operations.
- (66) Elevators - Access to work areas
- This refers primarily to freight elevators, but also to passenger. The same general factors as above apply. The general consideration is that the flow of material and people is efficient and does not interfere with other operations.
- (67) Elevators - Capacity
- Write capacity of all elevators. Check the column applicable to the best freight elevator.
- (68) Elevator - Size
- Ascertain size of largest elevator in square feet and write this in; then check the appropriate IBM code number.
- (69) Services - Water
- Determine, if possible, the size of the water main entering the building.
- (70) - Gas
- Same as above.
- (71) - Sewer
- Determine, if possible, whether there are any significantly good or bad features about the sewer, for industrial (not personal) purposes. Assume "Fair" if nothing significant noted.

(72-75) Services - Electric

Determine whether service is AC or DC, what voltage and current capacity is available in the building. By observation, note the general condition of the wiring. "Good" means all conduit of BX wiring, modern switch-boxes and controls, and permanently wired equipment. "Fair" means some temporary wiring, mostly RX or BX, older switch-boxes and controls, and/or some repair or replacement indicated. "Poor" means old knob and tube wiring, no evidence of rewiring in an old building, and obvious dangerous conditions.

Note: Poor lighting is not necessarily a "poor" electrical condition in this case.

(76) - Heating

Rate "Good" if the building is entirely heated and it is comfortably warm. Rate "Poor" if there is no heating.

(77) - Toilet
Facilities

Rate in general terms. Plumbing that is in obviously bad condition, and requires replacement is "Poor". Also "Poor" is a large building with only one or two toilets per floor, or any building which does not have facilities on each floor. "Fair" indicates some repair required.

Note: Do not let dirt and grime influence rating too strongly. Rate "Fair" if in doubt.

(78) Egress (Stairs and
Fire Escapes)

Rate in terms of the building containing workers and the difficulty or ease by which they could reach the exits. "Poor" would indicate only one exit per floor, open stairwells and/or fire escapes in bad condition.

D. Data Processing

The survey form was processed for key punching. A punched "deck" from the study has been turned over to the planning department. Electronic data processing was used for three reasons:

1. It is immensely faster and hence less expensive than processing by hand;
2. It allows for much greater analysis than would be possible by hand;
3. Clerical errors in handling are not introduced into the data.

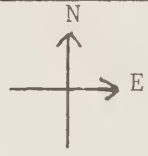
The computer was first programmed to calculate a rating for each building by averaging the rating on the individual items. The more important being weighted proportionately more heavily. The buildings were then classified as to whether their rating was in the top 10% of the buildings, the next 10%, etc. This ranking of one to ten was then used as the basic condition rating for the building.

Programs were written to produce tables, showing the amount of land area occupied by buildings in each ranking category, the amount of floor space in each ranking category and the number of employees in each. This was done for each industrial area and for each block. In addition, the average rating for each block and area was computed.

Finally, two different printouts of the data for reference purposes were made. Copies of all printouts have been turned over to the Division of Planning.

BUILDING SURVEY FORM

Conducted by
ARTHUR D. LITTLE, INC.
for the city of
Jersey City

3) File Number	Address of Property		Date		Time	
4-5) Space Category	Survey Guide					
6) Number of Firms	Position		Phone		Surveyor	
7-10) Number of Employees	Sketch of Property Layout					
11-15) Assessed Value Land						
16-20) Assessed Value Buildings						
21-23) Land Area						
24-26) Bldg. Floor Area						
27) Condition 1 Excellent 2 Good 3 Fair 4 Poor	Present Use (List names of the firms and nature of business)					
28) Basement 1 Usable 2 Partial 3 Unusable 4 None			See extra page ____			
29) Number of Floors	Comments and Evaluation					
30) Not Surveyed ____ Vacant ____ No Admittance ____ Other (explain)						

Extra building too small for survey

Condition

Land Area _____

1 Excellent

Bldg. Floor Area _____

2 Good

Employees _____

3 Fair

4 Poor

		0	1	2	3	4	5	6	7	8	9	x	
(0) Vacant Land				2 <10%						8 10.33		x >33%	
(1) Land Utilization	sq. ft.	0 <50		2 50-75		4 75-90		6		8 90-100			
(32) Building Utilization				2 >75				6	7 50-75		9 25-50		y <2
(3) Appearance of Adjacent Structures			1 Good			4 Fair		6			9 None	x Poor	
(4) Auto Parking Spaces per 10,000 sq. ft.	*		1 >10		3 3-10			6		8 1-3	9 None		
(35) Off-Street Truck Loading Spaces	*	0 >5	1 1-5	2 3	3 2	4 1		6					y Nor
(6) Off-Street Loading Per 1000 sq. ft. flr. space			1 >.1		3 .02-1			6				x <.02	
(37) Rail Siding Spaces		0 >3	1 3	2 2	3 1			6	7 None				
(38) Access From Street				2 Good		4 Fair		6				x Poor	
(39) Traffic Circulation				2 Good					7 Fair			x Poor	
(40) Air Conditioning				2 Good		4 Fair				8 None			
(41) Natural Light				2 Good		4 Fair		6		8 Poor			
(42) Age of Building	*	0 <5	1 6-15		3 15-30			6	7 30-50			x >50	
(43) Type of Construction		0 I		2 II		4 III		6		8 IV			
(44) Condition of - Outside Walls			1 Good			4 Fair		6				x Poor	
(45) Condition of - Foundation			1 Good			4 Fair		6				x Poor	
(46) Condition of - Roof			1 Good			4 Fair		6				x Poor	
(47) First Floor - Ceiling Ht.	ft.			2 12-15		4 >15		6		8 <12			
(48) First Floor - Loading	lbs.	0 Ex.		2 Good				6	7 Fair			x Poor	
(49) First Floor - Bay Area	x	0 >400	256 400	2		196-4 256		6		8 <196			
(50) First Floor - Floor Condition			2 Good			4 Fair		6				x Poor	
(51) First Floor - Wall Condition			2 Good			4 Fair		6				x Poor	
(52) First Floor - Ceiling Condition			2 Good			4 Fair		6				x Poor	
(53) First Floor - Windows Condition			2 Good			4 Fair		6				x Poor	
		0	1	2	162	3	4	5	6	7	8	9	x

		0	1	2	3	4	5	6	7	8	9	x	y
54) Upper Floors - Ceiling Ht. Ft.*				2 12-15		4 >15		6		8 <12			
55) - Loading Lbs.*	0 Ex.		2 Good					6	7 Fair			x Poor	
56) - Bay Area	0 >400		256-2 400			196-4 256		6		8 <196			
57) - Floor Condition			2 Good			4 Fair		6				x Poor	
58) - Wall Condition			2 Good			4 Fair		6				x Poor	
59) - Ceiling Condition			2 Good			4 Fair		6				x Poor	
60) - Windows Condition			2 Good			4 Fair		6				x Poor	
61) - Stair Condition			2 Good			4 Fair		6				x Poor	
62) General Layout of Building	0 Ex.		2 Good			4 Fair		6				x Poor	
63) Layout of Associated Buildings			2 Good			4 Fair		6				x Poor	
64) Elevators - Number	0 >3	1 3	2 2	3 1				6					y None
65) - Access to Shipping		1 Good				4 Fair		6				x Poor	
66) - Access to Work Areas		1 Good				4 Fair		6				x Poor	
67) - Capacity Lbs.*		1 >4000				2-4 4000		6			9 <2000		
68) - Size sq. ft.*			2 >60			4 24-60		6				x <24	
69) Services - Water sq. ft.*	0 >5	1 5	2 4	3 3				6	7 2			x 1	
70) - Gas sq. ft.*				3 >1				6	7 1				y None
71) - Sewer				3 Good		4 Fair		6			9 Poor		
72) - Electric			2 AC+DC	3 AC				6			9 DC		
73) - Electrical Voltage		1 440				4 220		6			9 115		
74) - Electrical Current	0 >2000	1 2000	2 1000	3 500				6		8 200		x 100	
75) - Wiring Condition		1 Good				4 Fair		6				x Poor	
76) - Heating		1 Good						6	7 Fair			x Poor	
77) - Toilet Facilities			2 Good			4 Fair		6			9 Poor		
78) Egress (Stairs and Fire Escapes)		1 Good						6	7 Fair			x Poor	

AREA		BLOCK NUMBER	
Block-Lot (1 - 3)	Space Category (4 - 5)	No. Employees (7 - 10)	Land Area (21 - 23)
			Bldg. Flr. Area (24-26)
			Condition (27)
			Area (31)

Appendix VIII

DATA SYSTEM FOR PLANNING IN CITY GOVERNMENT: RECOMMENDATIONS CONCERNING AN APPROACH FOR JERSEY CITY

A. Introduction

Electronic data processing has been extensively used for over a decade in business and industry. Utilization has not been limited to larger organizations; relatively small firms have also made use of the technique in the processing, storage and retrieval of information. In the public sector the magnitude of work efforts in the Federal Government stimulated the early use of computers in a variety of tasks. Local government has been relatively slow to adopt electronic data processing (EDP); however, in the last 10 years this picture has changed radically.

Local governments have responded initially by mechanizing well-understood clerical procedures such as payroll preparation, tax and appropriation accounting and utility billing. In most cases this has been followed by an increased awareness of other functions for which EDP would be useful. By its very nature local government has the custody of large files which it must maintain and from which it must be able to retrieve bits of information, for example, real property and assessment roles.

Closer to the planning function, the possibilities inherent in EDP for better and more complete information upon which to formulate policy are not difficult to see. Indeed, planners today are expected to base their proposals on a degree of factual knowledge which is almost impossible to achieve without EDP. This report, then, is directed toward suggesting ways in which Jersey City might utilize this as a tool in carrying out its responsibilities.

B. Computer Considerations

The basic conditions under which data processing is useful may be stipulated quite simply. Whenever, 1) the quantity of data is large and/or 2) a repetitious process is involved, human capabilities become inadequate. There are a number of tasks in city planning which fit this description. The effect of proposed policies on structures, businesses and people must be evaluated with sufficient accuracy so that a responsible decision can be made. Thus, the amount of tax base affected by a zoning change, the number of warehousing firms profiting from a new transportation link or the number of individuals qualifying for a proposed government service is apt to be most accurately ascertained either by counting the number involved or by accumu-

lating a large number of subtotals. Whenever data is stored electronically, the cost of preparation of such data is seldom greater than 1% of the cost of having it done manually. Furthermore, as planning departments are increasingly held responsible for a high level of knowledgeability, they must turn to techniques of analysis which, because of both their mathematical nature and the many steps involved in computation, generally require the use of a computer. Thus, the preparation of cross tabulations with percentages has become routine in planning studies.¹ Correlation coefficients are gaining common use, and regression and factor analysis have been developed for more sophisticated analysis.

It must be noted, however, that the glamor of the "Computer Age" has misled some organizations and institutions into "jumping onto the band wagon" when they were not utilizing data or performing functions that suit the advantages offered by the computer. In these cases it has generally been a matter of timing rather than the inapplicability of EDP. In other words, they were not prepared to do work on a level that required the accuracy and speed inherent in the electronic manner of processing data. It must be realized that EDP is expensive and, hence, the matter of timing is important.

This expense is usually related to the overhead involved in the EDP program rather than to the computer time itself and, as noted above, this cost is usually very inexpensive relative to other methods of obtaining comparable data. With these facts in mind, one can formulate a strategy of approach to the question of EDP.

C. A Three Stage Approach for Jersey City

We conceive of a three stage program in which the Division of Planning would acquire mastery in electronic data processing. Essentially these three elements comprise familiarity, data storage and retrieval and finally, continuous information processing.

In the first stage, some C.R.P. studies being undertaken by the Jersey City Division of Planning and their consultants might utilize electronic equipment for isolated data processing needs. This was done, for example, in the industrial building condition survey. Encouraged to investigate this resource the staff can gradually acquire familiarity with the advantages it has to offer. Furthermore, the required investment will not only be extremely small but also probably be outweighed by the advantages it pro-

¹ Arthur D. Little, Inc., for example, has such a program called ADLETAB for use by interested parties.

vides the researcher making the study.

As the Jersey City staff becomes more familiar with the capabilities inherent in EDP it is likely that they will gain some insight into the specific uses for which better data sources are needed. At this point they are ready to begin formulating how the Division might develop its own information banks since they will be in a position to know what data would realistically be used in the work of the department. Characteristic of what we might term the second stage are three basic data banks which have been used in many other situations and which might prove to be feasible in Jersey City. These three data banks are:

1. real property information on a parcel basis; this is discussed in greater detail below (see Section E).
2. employment sources coupled with a commercial-industrial data bank on a firm-by-firm basis;
3. population data by neighborhood units, probably census data on a tract basis.

Finally, in the third stage, decision-making becomes better informed and more sophisticated. Decision makers require an information system providing data on a continuous basis. There is manifested a need to make decisions based not only on the facts of the moment but on a knowledge of the context of how the situation has developed. The formulation of federal fiscal policy, for example, takes place in the context of an understanding of the trends of several indicators or barometers of the economic condition of the country. A sense of the trend of unemployment rates, GNP rates, etc. are essential ingredients for decision-making in this context. There is every reason to believe that before too long, in a city of 200,000, it will be feasible for the planning department and the planning commission, as well as the mayor's office, to have the advantage of such periodic guidepost data. The advantages of this as a tool for communication between elected lay bodies responsible for decision and the employed professionals should not be overlooked.

D. Supporting Considerations

The utilization of EDP, of course, requires technical personnel. Planning schools are now beginning to train some highly qualified personnel, but it is a well-known fact that in the foreseeable future the supply will be far short of the need. We believe that Jersey City will only slowly be able to add to its staff men adequately qualified in this field. This will probably mean that staff members in general will have to take upon themselves the responsibility of becoming familiar with this tool. We,

therefore, suggest that the staff be encouraged to take evening courses at such institutions as Stevens Technology, New York University and the New School for Social Research in appropriate EDP courses. Some staff members are presently in planning school and they should not be allowed to eschew the use of EDP in their regular planning studies because of a feeling that it is so complex, technical and even magical as to be unusable. The most fundamental uses of EDP are functions that need to be performed for good planning whether they are done by hand or by machine. It is likely that staff members will be surprised by how much easier it is to perform these tasks by machine.

Unless some other part of local government has suitable machinery and personnel, and we do not believe this to be the case in Jersey City, the Division of Planning will have to look outside for actual access to machines. Universities often have machines well-suited to the needs of planning and personnel capable of aiding the department staff and of adapting their problems to the machine's capabilities. Private firms also exist for this purpose.

The advantages of EDP have, to this point, been considered only with respect to the planning department but many other departments in city government also have great use for this tool and, specifically applicable here, many of these departments have need for information from the same basic data sources. Thus, there is a potential not only for the sharing of machines but for cooperation in the design of data banks. The extent to which this has not taken place is almost directly proportional to the amount of interdepartmental jealousy and provincialism present. Whatever the case may be in Jersey City, it must be realized that such cooperation can only be accomplished if each department involved adopts an undogmatic approach to negotiations.

Highly developed unified systems are sometimes proposed but this report is based on the assumption that a statewide, countywide and even a citywide system covering all aspects of government is not realistically open for consideration at present in Jersey City. Yet it is clear that several departments "close" to the planning department are likely to be using the same data. A real property data bank is obviously central to the operation of the assessor's office, though it is not now handled electronically. Other departments having an interest in the data in this file would include the Bureau of Building Inspections, the Redevelopment Authority and the Fire Department. Similarly, a file on employers and employment would be of interest to those handling business licenses for Jersey City and the programming of the use of police resources might be aided by access to information kept on a neighborhood basis. If properly planned

it is likely that a data bank might replace more than one file now handled manually.

A book that might stimulate consideration of the use of EDP was written by Edward Hearle and Raymond Mason, A Data Processing System for State and Local Governments, Prentice-Hall, Englewood Cliffs, New Jersey (1963). In analyzing many cities they developed an appreciation for the information which might properly be kept in a data bank. Their list of items referring to real property is quite comprehensive and we have included it as an appendix to this report. It may be seen that the parcel record contains information describing:

1. location of the parcel of land, both geographically and in relation to political jurisdictions;
2. the land itself and the structures upon, under and adjacent to it; and
3. the occupants and owners of the parcel.

Obviously, Jersey City would not wish to have so complete a record. It is clear, however, that having even a portion of these items on an electronic data file would give staff members inexpensive access to very accurate data.

E. EDP and the Industrial Condition Survey

The industrial survey recently completed by Arthur D. Little, Inc. serves as an example of the use of a consultant to incorporate electronic data processing procedure into the work of the department. In the manner described above as stage one, EDP was used as a tool for the data manipulation necessary to summarily analyze and display the data in easily usable form.

The information gathered in the survey was first recorded on IBM cards. Relatively simple Fortran programs were then written to allow an IBM 1620 machine to (1) score the various parcel cards, (2) compare them with each other and assign a decile ranking, (3) sum to totals for each block and area, (4) assign average rankings for each block and area, and (5) relate the rankings to the amount of land area, floor area and employment involved.

The resultant information constituted a small scale data bank which might be used to answer questions that the department may wish to research in the future, for example, what is the amount of building square footage of warehousing available near a proposed transportation facility? Furthermore, updating

the information at some time in the future will reveal in quantitative terms the changes taking place in the industrial plant. We recommend, therefore, that such a comparable survey take place every three to five years.

Some steps taken by the San Francisco City Planning Department at the conclusion of their Community Renewal Program serves as an example of how even this limited amount of information can be used. The department sensed the value of the data gathered in a similar survey in their city, reasoning that this was the only data source having items such as employment, type of building, and condition all in one place. The tax data included on the cards gave an approximation of the value of the building and the amount of renewal activity approximated from building permit data for the last twenty years was added. The resultant data bank has been one of the most used products of the CRP.

In Jersey City it is possible to add to the IBM cards presently on file data on industrial type (Standard Industrial Classification and assessed value). If this is done it will be possible to relate the value of the land and improvement to the age of the structure, to its location, and to the type of economic activity located within the premises in a logical and systematic fashion. Since the amount of employment is shown on this deck of cards it is also possible to analyze density by industry and area; indeed, the number of statistical manipulations which may be performed is endless for all practical purposes since over 50 different types of information are now housed on the cards which have been turned over to the Division of Planning. A comparison of their contents reveals that much of the data suggested for collection by Mason and Hearle is already on hand in Jersey City.¹

F. Conclusions

The cost involved in acquiring and keeping this type of data up-to-date ranges from a low of about one cent per piece of information to a high of about \$1.00 per bit of data. The total cost is obviously a function of how much data is to be stored, the amount of programing required and the type of equipment used. We suggest that an integrated approach is

1. Note Mason and Hearle: categories 1,2,3,6,9,11,14,15,32, 33,34,46,47,48,49 and 52, as shown in the Appendix, are to be found in the industrial condition survey cards.

needed and that a study be made to ascertain Jersey City's overall data processing requirements. At a minimum we would think that the industrial condition survey be up-dated every three to five years and be incorporated into such a framework. Sampling procedures will not work in this instance because one is acquiring a universe of information rather than making inferences from data already known. The present card layout and form is adequate and need not be changed for the city's purposes. One of the conclusions that is apt to emerge from the study recommended above is the need for one person in the Division of Planning to bear full responsibility for the introduction of EDP into the planning processes. In our judgement, the selection and appointment of such an individual would be a logical place in which to begin introducing EDP to Jersey City.

Appendix IX

A SELECTED LIST OF
REAL PROPERTY INFORMATION ITEMS

PARCEL RECORD

Locational Information

1. Parcel number
2. Parcel address(es)
3. Legal description
4. Grid coordinates
5. Street section reference
 - a. Side of street on which parcel lies
6. Parcel numbers of adjacent parcels
7. Political and administrative jurisdictions of all types
 - a. county
 - b. city
 - c. township
 - d. borough
 - e. special district(s)
 - f. school district(s)
 - g. judicial district(s)
 - h. voting precinct
 - i. electoral district(s) - e.g., councilmanic, assembly, congressional
 - j. school attendance area
 - k. department administrative district or service area - police, public works, health, utility, welfare, employment security
 - l. postal zone
 - m. improvement or assessment district
 - n. tax code area
 - o. "community" or unincorporated area
 - p. economic area
 - q. marketing area
 - r. hydrologic area
 - s. fire zone or district
 - t. traffic zone
 - u. census tract
 - v. census block and/or enumeration district
8. Physical block
9. Lot position (key, reverse, corner)
10. Maps on which parcel mapped

Land and Structural Characteristics

11. Parcel size
12. Zoning
 - a. zone variance
 - b. exception(s)
 - c. special use permit
 - d. conditional use permit
 - e. nonconforming use (expiration date)
13. Master plan category and plans affecting parcel
14. Land uses, including "activities on premises"
15. Assessed value
 - a. land, year assessed
 - b. improvements, year assessed
 - c. trees and vines, year assessed
 - d. personal property at this parcel
16. Exemptions
17. Taxable value
18. Tax delinquency
19. Liens, assessments and encumbrances
20. Deed restrictions
21. Easements
22. Water and/or mineral rights
23. Topographic characteristics
24. Drainage characteristics
25. Soil type
26. Productivity data
27. Extractive data
28. Fish and wildlife data
29. Date of last sale of parcel
30. Price at last sale of parcel
31. Rental price
32. Building characteristics
 - a. number of separate buildings
 - b. floor area of building(s)
 - c. portion of parcel covered by building(s)
 - d. setback of building(s)
 - e. frontage and depth of building(s)
 - f. height of building(s)
 - g. number of stories in building(s)
 - h. number of rooms in building(s)
 - i. existence of basement
 - j. number of dwelling units in building(s)
 - k. type and class of building construction
 - l. cost of building construction
 - m. year building(s) built
 - n. condition of building(s)
 - o. number and character of licenses and permits issued by all agencies pertaining to the structure on this parcel

33. Utilities connected
34. Waste disposal facilities
35. Presence of civil defence facility-shelter, first-aid station
36. Presence of special establishments
37. Presence of swimming pool
38. Police information
 - a. crime-type, date, time, case number
 - b. incident-type, date, time, case number
39. Fire information
 - a. fires at this parcel - kind, date, loss
 - b. fire alarm responses to this parcel - date, type (for example, false)
 - c. fire prevention inspection record
 - (1) date of last inspection
 - (2) violations noted
 - (3) special hazards identified - flammable liquids, acids, explosives, incinerator
 - d. rooms certified for maximum number of occupants
 - e. presence of automatic fire sprinklers, standpipes, extinguishers
 - f. presence of fire walls
 - g. rescue/ambulance responses to this parcel
 - h. distance from parcel to nearest fire hydrant and fire alarm box
40. Public health information
 - a. health hazard conditions at this parcel
 - b. diseases reported at this parcel
 - c. health permits (for example, food-vending establishment)
 - d. inspection records (see 39c.)
41. Automobiles registered at this parcel
42. Subsurface structures and improvements
43. Neighborhood characteristics
44. Proximity to special facilities
45. Personal property at parcel

Owner-Occupant Characteristics

46. Owner's name and mailing address
47. Occupant's name(s)
48. Occupancy group
49. Vacancy information as applicable
50. Number and kind of licenses and permits of all kinds granted to occupants
51. Residential occupant characteristics
 - a. number of occupants
 - b. number of households
 - c. number of occupants per room

- d. race of occupants
 - e. sex of occupants
 - f. age of occupants - month and year born
 - g. education of occupants - years of school completed
 - h. family income class
 - i. voters' registration of occupants
 - j. occupations of occupants
 - k. major industrial groups in which occupants are employed
 - l. employment status
 - m. place of work
 - n. means of transportation to work
 - o. tenure of household head
 - (1) previous address(es)
 - p. occupants rent or own?
 - q. occupants receiving public welfare services or assistance?
 - (1) type or category of aid received
 - r. occupants with criminal or correction records
 - s. children in school
 - t. birth-death data
52. Commercial/industrial occupant characteristics
- a. type of business(es)
 - b. parcel number(s) of other parcels comprising store or plant site
 - c. number of employees
 - d. employee places of residence
 - e. means of transportation used in getting to work
 - f. off-street parking spaces provided
 - g. labor force data
 - h. retail sales
 - i. business failures at parcel

STREET-SECTION RECORD

- 1. Section number
- 2. Section name
- 3. Section class (local, collector, arterial, freeway, etc.)
- 4. Section status
- 5. Section direction
- 6. Section limits
- 7. Section length
- 8. Intersecting sections
- 9. Intersection code
- 10. Jurisdiction code(s)
- 11. Section width
- 12. Street width
- 13. Section surface type
- 14. Section surface condition

15. Grade
16. Alignment
17. Drainage conditions
18. Traffic volume data
19. Parking space data
20. Presence of parking meters
21. Presence of curbs
22. Presence of sidewalks
23. Presence of street lights
24. Presence of sewers
25. Presence of storm drains
26. Presence of street trees
27. Presence of utility facilities
28. Presence of structures (grade crossings, bridge, tunnel)
29. Presence of traffic signals, stop signs and other traffic control devices
30. Public transportation facilities
31. Traffic accident data - day, time, type of accidents
32. Street and curb markings
33. Speed limits
34. Fire alarm boxes
35. Plans affecting section
36. Deficiencies
37. Parcel numbers of parcels adjacent to street section

Source: see text

Appendix X

URBAN INDUSTRIAL PLANNING STANDARDS

One of the functions which the Area Development Corporation might carry out would be the fairly rapid development of an industrial park in the Lafayette Industrial Area. This was discussed in more detail in Section V; in this Appendix we wish to discuss relevant planning standards which might be adopted.

The criteria for selecting prospects to locate in this area are:

- (1) A "growth industry" which is likely to enlarge on the site (see our section on the Economic Base, Table 8, for a list of such industries).
- (2) A firm with a relatively large labor input since the park will be located in the heart of a large labor pool and is designed to keep down unemployment.
- (3) A Jersey City firm which needs assistance in expanding or is otherwise forced to consider a new location due to renewal or adverse environmental conditions in the City.

The lot sizes in most suburban industrial parks are usually 5 to 10 acres, although there are frequently much larger sites available (i.e., up to 200 acres). In the Lafayette Area we would think that 1 to 3 acre lots should predominate with a few large sites (i.e., up to 15 acres).

An attempt should be made to interest builders in putting up two or three-story multi-tenant plants for the purpose of accommodating the smaller firm. These concerns might jointly own the structure as in a condominium which we have mentioned above, or they might rent their space from the builder, developer or Area Development Corporation - depending on who owned the facility. The use of double decker factories has been proposed in San Francisco which has inordinately high land costs. One estimate places the cost of constructing the second story at half the cost of the original ground level story. This scheme is patterned after shopping centers such as the Ala Moana in Honolulu, Hawaii, which has two levels or decks.

Although definite information is not available, recent developments in the materials handling field indicate that vertical goods handling techniques will soon be as efficient as horizontal ones and when this occurs the adamant need for one-story layouts will disappear. In view of the high land costs, when this technological breakthrough occurs, multi-story industrial plants will once again become as popular as single-story plants are today.

For the moment, however, in Jersey City we would recommend a maximum lot coverage of 60 percent. Thus, one-third of the block could be used for off-street parking, landscaping and most importantly, off-street loading. An investment of \$100,000 per acre would seem reasonable and a maximum worker density of 30 job holders to the acre would appear to be a sensible planning norm for new developments with a citywide average of 35 workers per acre.

All utilities, including water, sewerage, gas and electricity, and telephone should be brought underground into the park. Superior public transportation should exist in the area. Industry located in the park should be restricted by performance standards. An excellent set of such standards has been prepared by the Mercer County Industrial Commission. Entitled "Industry as a Good Neighbor", this brochure covers standards in air pollution, liquid and solid wastes, radiation, noise and vibration, fire and explosion hazards, and heat and glare. Since these standards are established for New Jersey municipalities and are related to New Jersey Statutes, we would suggest that the Division of Planning consider adopting the standards which they recommend and which are too lengthy and too detailed to describe here.

Finally, with respect to projects using air rights, Section 110 of Title 1 as amended by the Housing Act of 1964 provides for the acquisition of air rights and the construction of necessary foundations and platforms over highways, railways or subway tracks, or similar facilities. Five percent of Jersey City's urban renewal funds may be allocated for such projects. At present, however, air right projects are limited to housing and related uses and they are not permitted for industrial purposes. Moreover, they will not be authorized where the anticipated cost involved would be greater than the cost of renewing a comparable surface slum area in Jersey City.



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